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Plaintiffs: COLORADO OIL & GAS ASSOCIATION; COLORADO OIL AND GAS CONSERVATION COMMISSION, and TOP OPERATING COMPANY

Defendant: CITY OF LONGMONT, COLORADO

Defendant-Intervenors: OUR HEALTH, OUR FUTURE, OUR LONGMONT; SIERRA CLUB; FOOD AND WATER WATCH; and EARTHWORKS

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Case No.: 2013cv63

Division: 3

Eugene Mei, City Attorney
Attorney Reg. No.: 33442
E-mail: eugene.mei@ci.longmont.co.us
Daniel E. Kramer, Assistant City Attorney
Attorney Reg. No.: 43752
E-mail: dan.kramer@ci.longmont.co.us
City of Longmont
Civic Center Complex
408 3rd Avenue
Longmont, CO 80501
Telephone: 303-651-8616
Facsimile: 303-651-8914

Phillip D. Barber, Esq.
1675 Larimer Street, Ste. 620
Denver, Colorado 80202
Telephone: (303) 894-0880
Facsimile: (720) 904-5755
E-mail: Phillipbarber@aol.com
Attorney Reg. No.: 9623

CITY OF LONGMONT'S CONSOLIDATED RESPONSE TO SUMMARY JUDGMENT MOTIONS OF TOP OPERATING CO., COLORADO OIL AND GAS ASSOCIATION, AND COLORADO OIL AND GAS CONSERVATION COMMISSION

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The City of Longmont ("City" or "Longmont"), through undersigned counsel, files this Consolidated Response in Opposition to Motions for Summary Judgment filed by Plaintiffs TOP Operating Co. ("TOP"), the Colorado Oil & Gas Association ("COGA"), and the Colorado Oil and Gas Conservation Commission ("Commission" or "COGCC") and (collectively referred to as the "SJ Motions" or, where appropriate, "TOP's SJ Motion", "COGA's SJ Motion" or "COGCC SJ Motion"). Based upon the facts and authorities set forth below, the SJ Motions fail to meet the standards of Rule 56 and of preemption law, and must be denied.

I. INTRODUCTION

The question before the Court is whether a citizen-passed charter amendment which prohibits the controversial practice of hydraulic fracturing ("fracking") and the storage of fracking waste within the City of Longmont, now included as Article XVI of the Longmont Municipal Charter ("Article XVI"), must be summarily struck down or whether facts may show it to be a valid exercise of the City's home rule, police, and land use authority. Implicit in this question is whether the "sea change" in oil and gas exploration since the 1990s may change the fact-based home rule calculus performed in a prior Supreme Court case, and whether the COGCC's minimalist approach to regulating means there may be no conflict between Article XVI and the State's rules. The many disputed issues of material fact detailed in this Response require that Plaintiffs' motions be denied, and show that this case can only be resolved following an evidentiary hearing as required by law.[1]

[1] The length of this Response reflects the fact that it responds to three motions that total 70 pages, along with approximately 222 pages of exhibits. The length also reflects the fact-intensive nature of this case and the discovery that has occurred over the last 30 days.

Hydraulic fracturing is a "completion" process that injects large quantities of water, sand, and chemicals into a well after it has been drilled. The advent of massive hydraulic fracturing along the Front Range is relatively new, dating only to 2010. A confluence of several developments triggered the current fracking boom: clustering of wells on a single well pad, horizontal drilling, and technological developments in fracking itself. In 1990 a typical well pad had a single vertically-drilled well. Now, a well pad may now be home to as many as 60 horizontal wells, plus associated production facilities such as holding tanks, separators and dehydrators. Rather than having a vertical well that used no more than a few hundred thousand gallons of fracking fluid, horizontal wells may be injected with as much as 6-8 million gallons of water, sand and potentially toxic chemicals, *per well*. And, rather than being located on the eastern plains of Colorado or in rural areas, hydraulic fracking is being used in wells that are drilled within or near populous communities along the Front Range.

Well pads for hydraulically fractured wells resemble a major industrial operation. They are being constructed in residential areas, and near schools, parks and recreation areas. Roads must be built to service these multi-well sites, and pipelines, compressors, separators, dehydrators and storage must be installed at the well site. Eighteen-wheel trucks that bring the drilling rig, associated surface equipment, and the massive amounts of fracking fluids to the well site make hundreds of round trips over the City's roads and streets, *per well*.

The local effect of fracking is reflected in statements from Longmont citizens, some of which are presented in this Response. Although there are currently 10 to 12 producing wells in the City, there is no limit imposed by the COGCC on the number of additional wells that might be fracked in Longmont. Without Article XVI, fracking is likely. *Each* new well could be

injected with more fracking fluid than the *total* amount that has heretofore been injected in *all wells* drilled in the City.

A fracking operation takes place 24/7 for weeks, perhaps months at a time depending on the number of wells. The drilling derrick stands approximately 150 feet tall, compared with the average 30-foot roof line of a home. In addition to disturbances caused by the convoys of big-rig trucks, the drilling and production operation generates tremendous noise, along with water, air and light pollution. Citizens are rightly concerned that their property values will plummet and that they will become ill.

For instance, reportable spills from oil and gas operations occur on a daily basis in Colorado according to the COGCC's records. The *Denver Post* recently reported that methane levels along the Front Range were three times higher than previously estimated, and cancer-causing toxics seven times greater. Other studies suggest that cancers, low birth rates, birth defects, asthma, and other illnesses are frequently clustered among people living near the well sites.

In November 2012, Longmont's citizens chose to exercise the City's home-rule power by regulating fracking in Article XVI of the Longmont Municipal Charter. The citizens' interest was simply:

> to protect themselves from the harms associated with hydraulic fracturing, including threats to public health and safety, property damage and diminished property values, poor air quality, destruction of landscape, and pollution of drinking and surface water.

Longmont Municipal Charter § 16.2. Oil and gas exploration and drilling are all still permissible in Longmont. The only prohibited activities involve fracking itself and the onsite storage of fracking waste.

The City's experience with two leaking wells near a school and a popular reservoir in town, and groundwater contamination near other Longmont Wells, showed that fracking created considerable risks to the community, which include toxic contamination, air and water pollution, noise, streams of trucks laden with fracking fluids, earthquakes, reduced property values, and negative socioeconomic effects of a boom and bust cycle. The people also prohibited the storage and disposal of fracking waste within Longmont, because these related activities carry their own significant risks.

The City has learned that the COGCC does not regulate fracking and has abdicated its oversight responsibility to the oil companies. For instance, the COGCC does not issue fracking permits for any wells. Instead, the COGCC leaves it entirely to the oil companies' discretion to determine: whether to frack a well; when and where to frack; the kinds and amount of water and chemicals that comprise the fracking fluids that are injected into the well; and how often to frack (many wells are fracked multiple times), among other things. With over 52,000 producing wells in Colorado, and less than 20 well inspectors on staff, it is no wonder that it took years after the pollution was discovered at the Rider and Stamp Wells in Longmont for the operator – Plaintiff TOP Operating Co. – to come into compliance. The facts show that the COGCC's primary mission is more about allowing the oil companies to drill as many wells as they want, than about protecting the public and the environment. The COGCC's permitting manager has testified that could not recall the Commission ever denying a single drilling permit application. Because state

regulations do not say that an operator may or may not frack, Article XVI does not violate or conflict with state regulations.

Facts will establish that the oil and gas industry is not a monolithic enterprise. Oil companies used techniques that did not involve hydraulic fracturing for nearly 100 years after the first well was drilled in Colorado. The wells in the oldest oil field in Colorado -- the Florence Field, which was established in the 1860s – still do not use hydraulic fracturing as a completion technique. The records for at least one well in Longmont and several prolific wells in the Wattenberg Field (where the City of Longmont is located) show that not all wells have to be hydraulically fracked. Alternative methods to extract oil and gas without fracking are used today and more are being developed. Thus, the evidence will prove that Article XVI is not a *de facto* ban on drilling under Longmont.

The City has long exercised its home-rule, land use and police powers to regulate and in some instances prohibit various industrial and other uses within its boundaries. Longmont and other cities commonly use these local powers to bar brothels, slaughterhouses, feedlots, junkyards, confined animal feeding operations, casinos, racetracks, marijuana establishments, landfills, and other uses. *See* Exhibit "1" hereto.

Article XVI does not interfere with the State's interest, which is to foster production while protecting human health and the environment. § 34-60-102(1)(a), C.R.S. (2013). Instead, the State is currently failing to comply with this statutory mandate, because it is failing to regulate fracking or to protect human health and the environment from fracking. Article XVI does not prohibit fracking statewide, or even in all home rule cities statewide. It is modest in scope, applying only to Longmont, which comprises one quarter of one one-thousandth of the

land in Colorado. Article XVI's economic impacts on the State are miniscule. The question of whether to allow fracking in the City means much more to the citizens of Longmont than to the State of Colorado. In constitutional terms, the local interest outweighs the state interest.

Even if fracking is not primarily a matter of local concern, it is at the very least a matter of mixed local and state concern. At best, the evidence is disputed as to whether the fracking restriction substantially impairs or destroys the State's interest (which Plaintiffs have not defined in this case). At the evidentiary hearing which is required by Supreme Court decisions, Longmont will provide compelling evidence that Article XVI does not materially impair any interest the State may have in Longmont.

The COGCC has acknowledged that there has been a "sea change" in oil and gas drilling and completion practices since the Colorado Supreme Court last addressed the extent to which local communities can regulate oil and gas activities in 1992. No Colorado case has ever said that a home rule city cannot regulate the general methods of oil and gas operations, especially when alternative methods are available. To the contrary, the Colorado Supreme Court has given cities broad latitude to regulate oil and gas for the protection of community health and welfare.

The citizens of Longmont have decided to opt out of a risky industrial activity, in favor of the reasonable protection of their health, safety and welfare. Article XVI applies to a relatively small patch of land in a large state, and to a miniscule fraction of the oil and gas reserves statewide. For that small patch of land, the citizens of Longmont are *achieving* the state interest better than the State itself; to allow production while protecting human health, safety and the environment.

II. STATEMENT OF UNDISPUTED FACTS

A. The Parties and Their Authority

1. Plaintiff Colorado Oil & Gas Association ("COGA") is a trade association which brought this action on behalf of itself and its members who are companies engaged in the exploration, production, and development of oil and natural gas. COGA Complaint, ¶ 3. COGA has no statutory authority to regulate or represent the oil and gas industry.

2. Plaintiff Colorado Oil and Gas Conservation Commission ("Commission" or "COGCC") was created in 1951 as an agency of the State of Colorado. Its authority and limitations derive from the Colorado Oil and Gas Conservation Act found at C.R.S. §34-60-101, *et seq.*("Act" or "COGCA"). The Act requires that oil and gas resources be extracted in a "manner consistent with public health, safety and welfare, including protection of the environment and wildlife resources." C.R.S. §34-60-102. The Commission has adopted Rules and Regulations which are published at www.cogcc.state.co.us, and at 2 Colo. Code Regs. 404-1. None of those rules expressly allows or regulates the use of hydraulic fracturing. *Id. See* Parts II.B. and IV.B., *infra*.

3. Intervenor-Plaintiff TOP Operating Company ("TOP") owns, leases and operates wells within the City of Longmont, and has entered into several agreements with the City that are relevant to this case.

4. Defendant Longmont is a home-rule city located in Boulder and Weld Counties, Colorado. COGA Complaint, ¶ 6. Its powers derive in part from the Home-Rule Amendment to the Colorado Constitution which was adopted in 1902. Colo.Const.Art. XX, §6. In a special election held on November 6, 2012, the City's Home Rule Charter was amended by Article XVI

to prohibit the use of hydraulic fracturing to extract oil, gas and other hydrocarbons, and to prohibit the storage in open pits or disposal of wastes created by hydraulic fracking (referred to as Article XVI). *See* COGA Complaint, ¶ 20, and its Exhibit 1.

5. In addition to its home-rule power, Longmont has also been granted statutory authority over land use in the City by the "Local Government Land Use Control Enabling Act of 1974" ("Land Use Act"), C.R.S. §29-20-101 *et seq.*, which gives Longmont and other local governments the authority to plan for and regulate the use of land and industrial activities within their jurisdiction. Among other powers, the Land Use Act authorizes Longmont to regulate development in the City, including activities in hazardous areas and the use of land on the basis of its impact on the community or surrounding areas. *Id.* at §29-20-104.

6. Defendant-Intervenors Our Health, Our Future, Our Longmont; Sierra Club; Food and Water Watch; and Earthworks represent concerned Longmont citizens and were granted the right to intervene as defendants. The organizations have members who live in Longmont and are affected by oil and gas operations. Several have provided affidavits in this case; *e.g.* Exhibits "10" to "14" hereto.

7. Article 16.2 of the Longmont Municipal Code describes hydraulic fracking as a "well stimulation process . . . used to extract deposits of oil, gas, and other hydrocarbons through the underground injection of large quantities of water, gels, acids or gases; sands or other proppants; and chemical additives, many of which are known to be toxic." Section 16.2 of the Code also states that the people of Longmont "seek to protect themselves from the harms associated with hydraulic fracturing, including threats to public health and safety, property damage and diminished property values, poor air quality, destruction of landscape, and pollution

of drinking and surface water." *Id.* Hydraulic fracturing occurs after a well has been drilled and tested. At that point the well construction moves to the second stage called "completion", which is followed by the third phase of "production". *See* Exhibit "2" hereto, Deposition of Murray Herring, pp. 30-31. Some wells are completed and produce without hydraulic fracturing. *Id.* *See also* Parts II.G. and H., *infra*.

B. The COGCC Does Not Regulate Hydraulic Fracking Operations

8. The COGCC has only two rules that apply specifically to hydraulic fracking. Rule 205A(b)(2) states that an operator of a well that has received a "Hydraulic Fracturing Treatment" must complete a "chemical disclosure registry form" within 120 days after the fracking starts. However, the operator or vendor may refuse to disclose the identity and concentration of a chemical that it asserts is a "trade secret". COGCC Rule 316C requires an operator to give the Commission 48 hours advance notice of its intent to conduct hydraulic fracking. *See* Exhibit "3", hereto, Deposition of Stuart Ellsworth, pp. 110-15.

9. The COGCC does not issue permits that allow fracking, or advise an operator whether or when to frack a well. No COGCC rule regulates or monitors the amount of fracking fluid used in a well, or the chemical composition of those fracking fluids. An operator is free to frack a well as many times as it wants, all without obtaining permission from or regulation by the COGCC. *Id*., pp. 113-14. *See* Exhibit "4" hereto, Deposition of John Seidle, pp. 55-58. The operator alone decides how many "stages" of fracture treatments to apply to the well bore in "horizontal wells".[2] All of these decisions are left to the operator without regulation by the

[2] Commission Rule 100 states: "**HORIZONTAL WELL** shall mean a well which is drilled in such a way that the wellbore deviates laterally to an approximate horizontal orientation within the target formation with the length of the

COGCC. Ex. 3, pp. 70-71, 113-14. TOP's vice president confirmed these facts as to its operations in Longmont. Ex. 2, p. 88.

10. The Commission has never placed a condition on a well permit that an operator cannot frack a well. Ex 3, pp. 70-71. The COGCC has never limited an operator's ability to frack wells in the Wattenberg Field. The Commission does not mandate the types or amounts of fluids that can be used in a fracking operation, whether a well can be fracked, when a well could be fracked. *Id.*

11. Stuart Ellsworth provided an affidavit and works as the manager of engineering at the COGCC, and has been for the past 5-1/2 years. Ex 3, pp. 9-11. He leads the engineering group in administering the rules of the Commission. *Id.* He could not recall a single instance where the Commission denied a request from an operator for a drilling permit. *Id.*, pp. 147-48. He acknowledged that some of the 52,049 producing wells in Colorado have not been fracked and nonetheless produce oil and gas. *Id.*, pp. 117-119; 67; *See also* Exhibits "39", "44" and "47" hereto. Mr. Ellsworth stated that the COGCC does not have a definition of the meaning of the "technical". *Id.*, pp. 144-145. In his view, "technical" had no common meaning or definition and it was "[d]efined by the individual that's using the term." *Id.*, p. 145.

12. The COGCC allows operators to determine the number of wells and surface facilities at a fracking site. For example, in May 2013, the COGCC granted a permit to Mineral Resources, Inc. to drill 37 wells, install 37 units known as "separators", 18 oil tanks, and two water tanks on a single location, within 350 feet from a low-income apartment complex in

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horizontal component of the wellbore extending at least one hundred feet (100') in the target formation, measured from the initial point of penetration into the target formation through the terminus of the horizontal component of the wellbore in the same common source of hydrocarbon supply."

Greeley. *See* Exhibits "5" and "6" hereto; Ex. 3, pp. 51-58. Nothing in that permit regulated the operator's ability to frack the 37 wells. In another case, the COGCC granted a permit for a site that would have 67 wells, 30 separators, 32 oil tanks and four water tanks on a single location, within about 350 feet from an elementary school playground and 600 feet from the school itself. That permit also has no restrictions on fracking, and the COGCC did not require any emergency evacuation plan, even though the current plan for the nearby elementary school is to have the children file out of the back door – toward the oil and gas facility. *See* Exhibits "7" and "8", and Ex 3, pp. 60-66.

13. John Seidle provided an affidavit to COGA and has worked as a consultant for oil and gas companies for many years, and his company currently works on behalf of COGA and the industry. Ex 4, pp. 6-7. He confirmed that oil and gas companies make all of the decisions about hydraulic fracturing operations; the COGCC does not regulate that area. Operators determine what wells to frack, how many times to frack those wells, how many places in the wellbore to frack, the amount of fluid to use in a fracking operation, where to dispose of the fluid, and the composition of the fluid, including the amount of chemicals and sand that are injected into the wellbore. *Id.*, pp. 55-58.[3]

14. Wells were drilled in Colorado and produced for over 100 years before fracking came to this state. *Id.*, p. 39. Mr. Seidle noted that when industry began drilling and fracking horizontal wells in 2010, and clustering more wells on one pad, this was a "striking change" in

[3] Mr. Seidle characterized a shale reservoir as one that is "unconventional", and a "conventional reservoir is [a] high permeability reservoir." *Id.*, p. 13.

practice because it allowed companies "to exploit formations we could not have commercially exploited previously." *Id.*, pp. 79-80.

15. Ed Holloway also provided an affidavit. He is the co-CEO of Synergy Resources, Inc., which holds over 100,000 acres of drilling rights in the Wattenberg Field and elsewhere in Weld County. *See* Exhibit "9" hereto. Article XVI has had no impact on Synergy's profits. *Id.*, pp. 44-45. Synergy, not the COGCC, determines all aspects of its fracking operations, including: which of its wells to frack, how many frack stages will be created in each well, the amount of chemicals, water and sand to use, when and how many times to frack its wells. Wells may be hydraulically fractured on several occasions. *Id.*, pp. 22-24, 54-55.

16. Colorado Governor John Hickenlooper has acknowledged that oil and gas is an industrial process that none of us want in our back yard." Elise Thatcher, *Fractivists Push for Statewide Moratorium*, Aspen Public Radio (July 14, 2013; 11:05 a.m. (audio at 1:57) *available at* http://aspenpublicradio.org/post/fractivists-push-statewide-moratorium (audio of 9:40 duration toward bottom of page, at 1:57).

17. Article XVI only prohibits fracking; it does not prevent or ban drilling oil and gas wells in Longmont. Ex. 1; Ex. 9, p. 74; Ex. 3, p. 22; Ex. 4, p. 84. Even if an operator chooses not to develop a formation at the present time, it can be exploited in the future. Ex. 9, pp. 22-23.

C. Local Impact of Oil and Gas Operations on Longmont's Citizens, Their Health and Property Values

18. Mr. Rod Brueske's affidavit is attached hereto as Exhibit "10". Mr. Brueske's residence is located about 460 feet from one of the wells that has polluted the City. He is concerned that "the COGCC has failed to effectively regulate hydraulic fracturing operations in

this state" and, consequently, that he and his family may be exposed to health hazards "related to the release of volatile organic compounds (VOC), hydrocarbon vapors, and toxic chemicals from fracking." *Id.* at ¶ 8. Mr. Brueske notes "that weak enforcement of regulations and fines by COGCC will result in additional negative impacts on me, my family, and my property due to this specific [Rider] well", and will endanger his family and his respiratory health. *Id.*, ¶¶ 5-7.

19. Shane Davis is another Longmont citizen who has been affected by fracking. He determined that there are active oil and gas wells within a one-mile radius of his home, one of which is within 200 feet of a public school. *See* Exhibit "11", Declaration of Shane Davis, ¶ 4. Before moving to Longmont, Mr. Davis lived in Weld County where his home was close to many fracking operations. He experienced "major impacts to my health that I attribute to oil and gas activities when I lived in Weld County," including "sharp headaches, burning and irritated eyes, nose bleeds, nasal congestion, burning throat, and severe gastro-intestinal problems." *Id.*, ¶ 5. When he moved away from the fracking site, he recovered from those conditions. Mr. Davis bases part of his objection to fracking in Longmont upon a study that determined that about 55% of the volatile organic compounds linked to unhealthy ground level ozone in Erie were attributable to fracking operations.[4] *Id.*, ¶ 6.

20. Jean Ditslear lives less than a mile from three proposed fracking sites. *See* Exhibit "12" hereto, ¶ 5. Her husband has asthma. She believes that his health will be "severely affected if the Charter Amendment is invalidated and fracking sites are developed." In addition to being concerned with air pollution, air emissions, land use and chemical spills, she is "aware

[4] J.B. Gilman, B.M. Lerner, W.C. Kuster, J.A. deGouw, *Source Signature of Volatile Organic Compounds from Oil and Natural Gas Operations*, Environmental Science Technology Journal Vol. 47, pp. 1297-1305 (2013), found at http://pubs.acs.org/doi/abs/10.1021/es304119a.

that these [fracking] operations can cause endocrine diseases and cancer." *Id.*, ¶ 8. Fracking at wells near Union Reservoir will prevent her family from swimming there, *Id.*, ¶ 10, "will decrease the value of my property", and will harm Longmont's economy since citizens "will likely move from Longmont if fracking is allowed." *Id.*, ¶¶ 11-12.

21. Kaye Fissinger has lived in Longmont for many years. She supported Article XVI because it was necessary to protect the health and safety of her family and community. *See* Exhibit "13" hereto. Ms. Fissinger is a cancer survivor who believes "that fracking is more dangerous than other methods used to extract oil and gas, especially in residential areas," and that current COGCC regulations will allow fracking near her home and the homes of her granddaughter and great grandchildren. *Id.* at ¶ 16. The damages that fracking will cause her include: water contamination and chemical spills; chemicals and carcinogens emitted into the air in the City; her immune system and overall health will be at risk; and her property values will decrease. *Id.*, ¶'s 17-18.

22. Bruce Baizel is the Director of Oil and Gas Accountability Project (OGAP). OGAP is a program of intervenor Earthworks whose mission is to work with tribal, urban, and rural communities to protect their homes and environment from the impacts of oil and gas development. *See* Exhibit "14" hereto, ¶ 2. Mr. Baizel supervised the preparation of a report by OGAP in 2012 that analyzed the inspection capacity of the COGCC, which determined that "more than 60% of all oil and gas wells in Colorado go uninspected in a given year; each state inspector is responsible, on average, for inspecting nearly 3,000 wells annually, yet in 2010 each inspector averaged only slightly more than 1,000 inspections." *Id.*, ¶ 4. The OGAP report "found that the number of spills reported [to the COGCC] has significantly increased between

2004 and 2011 with 26% of the reported spills in 2011 contaminating ground or surface water." *Id.*

23. The Plaintiffs presented four affidavits with their motions. None of the affiants live in Longmont. Mr. Herring lives 45 minutes from the nearest fracking operation. Ex. 2, p. 147. Mr. Seidle lives about six miles from the nearest well. Ex 4, p. 4. Mr. Ellsworth lives in Littleton. Ex. 3. Mr. Holloway's home is over a mile from the nearest well. Ex 9, p. 6.

24. Carol Kwiatkowski is the Executive Director of TEDX, The Endocrine Disruption Exchange. *See* Exhibit A to Defendant-Intervenors' Response. She has authored several scientific articles on natural gas operations, specifically related to the impacts of natural gas operations on human health. *Id.*, ¶ 4. In the course of her research about the health impacts of chemicals used in fracking operations, she became concerned that air pollution from natural gas operations was a serious threat, in addition to possible water contamination. *Id.*, ¶ 11. In a 2010 study that TEDX conducted in Garfield County on areas impacted by natural gas operations, methane, ethane, propane, toluene, formaldehyde, acetaldehyde, and naphthalene – all of which can be toxic – were detected in every sample. *Id.*, ¶ 19. The levels of another toxic substance – polycyclic aromatic hydrocarbons ("PAHs") levels in Garfield County were three times higher than those in New York City. Studies of PAHs in New York found that those chemicals result in "increases in preterm births, low birth weight babies, and smaller skull circumferences." *Id.*, ¶'s 25, 26. Ms. Kwiatkowski points to other studies which show increased health risks assessments from air emissions from development of unconventional natural gas resources and "cancer, birth defects, and exacerbation of chronic diseases like asthma, chronic obstructive pulmonary disease ("COPD"), and cardiac disease as possible long-term health effects. *Id.*, ¶ 29.

Ms. Kwiatkowski also points to other studies in Colorado and Missouri that suggest the presence of endocrine disrupting chemicals in people living near oil and gas wells, which correlate to a mother being more likely to have a baby with a heart defect. *Id.*, ¶ 34.

25. A realtor in Boulder County who has worked in the Longmont area for 24 years has observed that fracking operations negatively affect the value of a home. Affidavit of Nanner Fisher, attached as Exhibit C to Defendant-Intervenors' Response. Her experience as a realtor shows "that many clients will either not purchase or will offer a reduced amount for a home near fracking or a proposed fracking site." *Id.*, ¶ 4. She advises clients who are planning to sell their property that "if oil and gas wells are nearby . . . they will likely have to decrease their listed price in order to sell their home." *Id.*, ¶ 5. Her advice is based on her personal and professional experiences in the real estate market. Property values are negatively affected by fracking operations "because of the concerns about health, environmental damage, light, noise, and aesthetic appeal." *Id.*, ¶ 6. She notes that many buyers would not be comfortable buying a home within 1,000 feet of an existing or proposed well, and "that some buyers would not even consider purchasing a home within a mile or more of an existing or proposed natural gas well." *Id.*, ¶ 10.

26. Mary Ellen Denomy has submitted an affidavit on behalf of Defendant-Intervenors in this case. *See* Exhibit B to Defendant-Intervenors' Response. She is an oil and gas accounting and financial expert who has resided in Garfield County since 1993. She has personally experienced the change in the density of wells allowed near her home, and states that "the odors that permeate from the pits used to store the fracking water located at well sites have given her [headaches]." *Id.*, ¶ 12. On "numerous occasions" she is unable to run her swamp

cooler because it brings the odors into her home. One of her clients who also resides in Garfield County received blood testing results that show benzene in her bloodstream. *Id.*

D. Impacts of Existing Wells on Longmont's Environment

27. Many well sites in Longmont have polluted the surrounding areas, including the **Rider #1 Well** which is located near Trail Ridge Middle School in Longmont. The Rider Well was fracked in 1982. *See* Exhibit "20" hereto, WELLS 002. Rod Brueske lives near and has complained about the well. Ex. 10, ¶ 5. In 2006, another property owner, Engle Homes, discovered that the Rider Well had benzene levels measuring nearly 100 times higher than state limits and filed a complaint with the Commission. *See* Exhibits "15" and "16", hereto.

28. Groundwater testing at the Rider Well in 2006 found 491 parts per million of benzene, far above the 5 parts per million allowed by Colorado law. The same testing still showed 43 parts per million in 2009. The pollution had apparently been present since the 1980s. Ex. 2, pp. 105-14. Final clean-up at the Rider Well did not occur until 2014, eight years after the complaint was filed with the COGCC and decades after the pollution started. *Id.* In the meantime, additional leakage and spills were discovered at the well in 2012 and a second complaint was made to the COGCC. *See* Exhibit "18" hereto; Ex. 2, pp. 108-110; *See* Exhibit "17", p. 6; Ex. 16, p. 1. After the complaint, the COGCC cited the operator of the Rider well – TOP Operating Company – for "spills of crude oil at wellhead and at produced water tank and loadout valve." *Id.*

29. The **Stamp #2 Well** is another TOP-operated well that is located on the edge of Union Reservoir, a popular recreation site in Longmont. Ex. 12, ¶ 10. The Stamp Well had been polluting the groundwater since the 1980's when it was fracked. Ex. 20, p. WELLS014.

Groundwater testing near the well showed ethylbenzene levels were 20 times the statutory limit, xylenes were almost three times, and gasoline range hydrocarbons were 20 times statutory limits. Ex. 13; Ex 2, pp. 111-114. Groundwater pollution was discovered by the City, not the COGCC, and was documented in a 2013 report from Terracon Consulting. *Id.*; *See* Exhibit "19" hereto, sec. 5.1, p. 8. Terracon tested all of the other TOP-operated wells and found groundwater impacts at the Sherwood #1, Serafina, Evans #6 and Domenico #1 sites were affected by oil and gas contamination; for a total of 6 out of 10 wells in the City. *Id.*, pp. 12-14. Except for the Mayeda Well, all of these wells have been hydraulically fractured, some on more than one occasion. Ex. 20, ¶ 6 and WELLS 001-41. For more information on groundwater impacts of fracking operations, see Mark Jaffe, *Hydraulic Fracturing Linked for First Time to Groundwater Pollution*, Denver Post, Dec. 9, 2011; Robert B. Jackson et al., *Increased Stray Gas Abundance in a Subset of Drinking Water Wells near Marcellus Shale Gas Extraction*, PNAS, v.10, n.28 , 11250-55 (July 9, 2013).

30. Presently there are approximately 10 to 12 producing wells in Longmont which include the Rider and Stamp Wells. Ex. 20, ¶ 5. When Article XVI was passed in 2012 many of the wells within the City were not complying with COGCC rules. *Id.*

E. Dangers That Fracking Poses to Public Health

31. Health Problems. There are many documented health risks associated with fracking operations. *See generally*, Ex. A to Defendant-Intervenors' Response ("Kwiatkowski Aff."). A separate 2013 study "observed an association between density and proximity of natural gas wells within a 10-mile radius of maternal residence" and birth issues such as congenital heart defects and neural tube defects. *See* Exhibit "21" hereto, p. 2. The authors of the study stated

that their research "underscore[d] the importance of conducting more comprehensive and rigorous research on the potential effects of [natural gas development]." *Id*. at 16. Another 2012 study in *Scientific Solutions*, determined the following: "Animals, especially livestock, are sensitive to the contaminants released into the environment by drilling and by its cumulative impacts. Documentation of cases in six states strongly implicates exposure to gas drilling operations in serious health effects on humans, companion animals, livestock, horses, and wildlife … without complete studies given the many apparent adverse impacts on human and animal health, a ban on shale gas drilling is essential for the protection of public health." *See* Exhibit "22" hereto, p. 72.

32. Increased drilling in Colorado has been linked to "endocrine disrupting chemicals, which in turn has been linked to negative health effects in humans and animals. Kwiatkowski Aff; *See* Exhibit "23", p. 1. "There is evidence that hydraulic fracturing fluids are associated with negative health outcomes, and there is a critical need to quickly and thoroughly evaluate the overall human and environmental health impact of this process." *Id*., p. 9 (*Estrogen and Androgen Receptor Activities of Hydraulic Fracturing Chemicals and Surface and Ground Water in a Drilling-Dense Region*). People living near fracking operations have been tested positive for benzene in their blood – a condition that can be fatal. Ex. B to Defendant-Intervenors' Response ("Denomy Aff.").

33. Decreased Property Values. A complaint submitted by a landowner adjacent to the problematic Rider Well in Longmont complained that the pollution from the well had a negative effect on the value of his property. Ex 17, p. 7. A Boulder County realtor reports that even the prospect of an oil and gas well can have a negative impact on property values and on

potential buyers. Ex. C ("Fisher Aff.") and Ex. D ("Throupe Aff.") to Defendant-Intervenors' Response; Part II.B. 25. Dr. Throupe's 2013 study determined that "[o]ur contingent valuation surveys show a 5%-15% reduction in bid value for homes located proximate to fracking scenarios, depending on the petroleum-friendliness of the venue and proximity to the drilling site." *See* Exhibit "25" hereto, p. 205; Throupe Aff. *See also, Banks Reluctant to Lend in Shale Plays as Evidence Mounts on Harm to Property Values Near Fracking, 2013*, Exhibit "27" hereto. ("In Colorado, real estate brokers describe keeping a long list of sellers in heavily fracked areas, but a paucity of buyers.").

34. Spills. Oil and gas companies reported 156 spills in Colorado from January 2014 – March 2014. *See* Exhibit "28" hereto. TOP's Rider and Stamp Wells had both spills and leaks that dated to the 1980s, or earlier. Exs. 15 and 18 hereto.

35. Air Pollution. People living within a half-mile of oil and gas well fracking operations were exposed to air pollutants five times above a federal hazard standard, according to a recent Colorado study by the University of Colorado Denver School of Public Health. *See* Exhibit "29" hereto; Kwiatkowski Aff. The study noted that "the greatest health impact corresponds to the relatively short-term, but high emission, well completion period" that is involved with hydraulic fracking operations. *Id.*

36. Explosions and Fires. With increased oil and gas activity near people, comes increased risks from fires and explosions. In a May 1, 2014 article "Front Range Firefighters Gird After Oil Fires as Wells Encroach", the Greeley Fire Chief was "worried" on account of "six recent fires and explosions [that] rocked industry facilities." *See* Exhibits "30" and "31" hereto. The Fire Chief is quoted as saying "[H]e dreads what might happen if an industry gas

truck rolling through Greeley ignites." *See* Exhibit "32" hereto, Jerrod Vanlandingham Affidavit. *See also* Ex. 32A at 2 (describing incidents including one earlier this year where a "building exploded"). Ironically, COGCC Director Matt Lepore said "local governments are the lead agencies in emergency response and house the expertise in emergency response, including the best understanding of personnel, training and equipment". *Id*. In other words, the COGCC grants permits that create the problem, but leave it up to the local communities to deal with it.

37. Earthquakes. Both Ohio and Oklahoma have measured an increase in "seismic incidents" (earthquakes) in areas where injection wells and the "process called hydraulic fracturing" are present. *See* Exhibit "33" hereto, p. 1; Ex. 2, pp. 141-142.

38. Traffic. The fracking fluid arrives in thousands of truck trips, with associated noise, pollution, nuisance and danger. Increases in traffic volume from oil and gas activity "contribut[e] to a spike in traffic fatalities in states where many streets and highways are choked with large trucks and heavy drilling equipment." In North Dakota, for instance, while the population has increased 43% over the last decade during the hydraulic fracking boom, traffic fatalities have increased 350% compared to ten years ago. Traffic fatalities in counties where drilling occurs were 200-250% more likely than on roads in other areas of the states. *See* Exhibit "34" hereto; *See also* Exhibit "38" hereto.

39. Burden on local resources. Longmont's Deputy Public Safety Chief for Fire Services echoes the concerns of Greeley's Fire Chief, noting that "the more wells in a given area, the higher the risk of a fire event occurring in the area at any given time." Ex. 32. The risks include burn damage, and "hazardous materials being released into the air and blowing into densely populated areas" as well as the associated risks to firefighters attempting to suppress

these fires. Each additional well includes the increased risk of "large transport vehicles carrying flammable liquids and other hazardous materials on city streets." To deal with these occurrences, Longmont would need to "procure additional equipment to suppress such fires, such as apparatus and a foam suppressant, and would need to devote firefighter time to receive additional training." *Id.*, ¶'s 6-7.

40. Spills from Flooding. Historic flooding occurred in Longmont and Northern Colorado in September 2013 near oil and gas facilities. *See* Exhibit "35", p. 1. The COGCC estimates that the September 2013 flooding released 48,090 gallons of oil and gas condensate and 28,890 gallons of produced water. *Id.* These are the amounts reported by industry, and are possibly low.

F. There Has Been a "Sea Change" in the Scale and Intensity of Oil and Gas Operations Since *Voss* and *Bowen Edwards*

41. COGCC records show that there has been oil and gas exploration in Longmont since at least the 1950s. *See* Exhibit "36" hereto.

42. The scale of oil and gas operations has changed dramatically since 1992, when *Voss* and *Bowen/Edwards* were decided. For instance, the amount of fracking fluids that was used to frack the Producing Wells in the City ranged from 0 gallons of fluid, Ex. 20 Mayeda #2 Well at Exhibit 2 WELLS023, to 225,928 gallons of "slurry" in the Sherwood 2 well. *Id*. at WELLS037. None of those wells are of the new variety known as "horizontal wells" that have been drilled since about 2010. The Producing Wells in Longmont used a total (for all wells) of

about 1,175,000 gallons of fracking fluid.[5] By contrast, 7,819,560 gallons of fracking fluid was injected in a single horizontal well in the Wattenberg area. *Id.* Ex. 3, p. 124; *See* Exhibit "37" hereto, p. 3. Stated differently, *one* horizontal well may be fracked with 31 times the amount of fluid used in a typical vertical well drilled in the City, and 400-500% more fracking fluid than was injected into *all Producing Wells* in the City combined. *Id.*; Ex. 4, p. 67.

43. The Producing Wells in Longmont represent approximately 0.019% of the 52,049 producing wells in Colorado, a miniscule percentage. *See* Exhibit "39".

44. Gone are the days when only one vertical well was drilled from a well pad. Mr. Ellsworth pointed to the COGCC's adoption of the "GWA" spacing rules in the late 1990s as an event that limited drillsite locations. This in turn meant that oil and gas wells and supporting surface facilities such as separators, storage tanks and compressors began to become concentrated at a well pad. Ex 3, pp. 41-44. As a result of the new GWA rules, the innovation of directional and horizontal drilling has also changed the picture because those drilling techniques allow a well to reach an underground deposit of oil and gas that may be two miles from the surface location of the well. Thus, instead of having a single well, one storage tank and perhaps one separator or dehydrator, a well pad may contain a multiple of each of those facilities, and even as many as 67 wells and support facilities. *E.g.* Exs 5, 6, 7, and 8.

45. Synergy Resources Corp. has begun drilling six horizontal wells on a single well pad near Union Reservoir. Ex. 9, pp. 90-91; *See* Exhibits "40" and "41" hereto. The Union Reservoir well pad is located in Firestone, Colorado, but several of the horizontal wells pass

[5] But *see*, Ex. B to Defendant-Intervenors' Response, ¶ 7, which notes that state records indicate 12 producing wells at the present time.

under Longmont. Ex 41. Without Article XVI, several of the Synergy wells might have been fracked under Union Reservoir. In exchange for a road access across property owned by the City, Synergy agreed not to frack any wells accessed from the road under the City – they have nonetheless been fracked under Frederick. *See* Exhibit "42" hereto, ¶ 5.b; Ex. 9.

46. In February 2013, the COGCC promulgated amended "Setback Rules". Cause No. 1, Docket No. 1211-RM-04 Setbacks. *See* Exhibit "43" hereto. Those Setback Rules are "not intended to alter, impair, or negate local governmental authority to regulate matters of local concern, including land use, related to oil and gas operations, or to regulate matters of mixed local and state concern provided such local regulations are not in operational conflict with these Rules." *Id*. The Setback Rules "are not intended to address oil and gas development's potential effect on "human health" because there are "data gaps that warrant further study." *Id.*, p. 2.

G. Not All Wells Need to be Fracked to Produce

47. All wells in Colorado are not hydraulically fractured. The oldest oil field in Colorado dates to the 1800's, the Florence Field. It has produced over 15,000,000 barrels of oil and, as far as records indicate, and new wells are still being drilled. None of those wells has been hydraulically fractured, even though they are completed in a shale formation like the shale found in the Wattenberg Field. Ex. 3, pp. 31-31; *See* Exhibit "44"hereto, ¶ 7.

48. Counsel for Longmont's cursory review of a few of the well completion reports in COGCC's data base reveals that many wells in the Wattenberg Field have not been hydraulically fracked.[6] For instance:

- The McKay Federal #AB02-15 Well is in the Wattenberg Field and was never fracked. Drilled by Noble Energy, Inc. in 2012, the treatment summary of this well states that "No Fluids were used to complete the well." Yet, this well is a prolific producing well. *See* Exhibit "45" hereto; Ex. 24; Ex. 3, pp. 73- 76.

- The McKay AB Federal #2-14 Well is in the Wattenberg Field and was never fracked. Completed in June 2010, the well record states: "Treatment summary: Lyons [formation] not frac'd or treated." This well, never fracked, has produced over 326,000 barrels of oil in approximately 3-1/2 years. *See* Exhibit "46" hereto . The McKay wells were completed in The Lyons Formation, which is present under Longmont and could be drilled there too. Ex. 4, pp. 73-76. Both McKay wells were completed without fracking in a formation which is "pervasive" throughout the Wattenberg Field. Ex. 4, pp. 106, 108.

- The Weld #5-28 Well is operated by Noble Energy, Inc. and is located in the Wattenberg Field. It was completed in the J-Sand formation and states that there was no treatment of the well at the time of completion. *See* Exhibit "47" hereto. The J-Sand underlies Longmont as well.

[6] None of the Plaintiffs has performed a data search to determine the total number of wells in Colorado or the Wattenberg Field that were *not* hydraulically fracked.

- The records for the Mayeda #2 Well – drilled in Longmont in 1984 – show that it was completed in the J-Sand without hydraulic fracking. Ex. 20, p. WELLS23.

The total number of Wattenberg Wells that have been or could be completed without fracking is not known, in part because the Commission records are not complete. Mr. Ellsworth had never been responsible for drilling an oil and gas well, and did not know how whether wells were hydraulically fractured in Colorado before the 1970's. *Id.*, p. 32.

H. Alternatives to Hydraulic Fracking

49. There have been producing wells in Colorado since the 1800s, even though hydraulic fracturing treatments did not occur in Colorado until the 1970s. Ex. 3, p. 31.

50. The scale of hydraulic fracturing has changed since early 2000. The amount of water, sand and chemicals used in this process has greatly increased over the past 10 years or so with the introduction of horizontal drilling, as has the amount of large truck traffic, noise, emissions from wells and trucks, and waste from the fracking process. Horizontal wellbores can easily be one to two miles in length and are hydraulically fractured with millions of gallons of fluid over the length of the well bore, sometimes more than once. By contrast, when hydraulic fracturing was used to frack vertical wells, the sand volume of the frack job was typically much less and required only a fraction of the amount of fluids and chemicals used today. Ex. 44, ¶ 6; Ex 38.

51. Fracking is not needed or used in all wells that are drilled in Colorado and other states. Ex. 44, ¶¶ 7-8. As background, wells are often drilled using drilling mud and substances to create a hydrostatic pressure that acts as a barrier and prevents a formation from producing hydrocarbons while the well is being drilled. Ex. 44, ¶¶ 4-5. Other wells are drilled employing a

different process known as "underbalanced drilling a/k/a ("UBD") non-damaging reservoir drilling". UBD wells do not require hydraulic fracking. *Id*. In a nutshell, UBD does not use mud and chemicals during the drilling of the reservoir to create a barrier that holds back the inherent pressure of the reservoir which is the energy that drives hydrocarbons through the reservoir to the wellbore to bring oil and gas to the well surface. The UBD process requires a smaller operational foot print and thus there is less surface disturbance. It does not need to use water to remove damaging drilling mediums such as heavy drilling muds. This technique allows the well to produce hydrocarbons using its natural, unrestricted pressure while the reservoir is being drilled. Because the process does not use an engineered mud system during the drilling process, it does not require hydraulic fracturing to reconnect the reservoir to the wellbore so that it can produce. Ex. 44, ¶ 8. UBD "eliminates the need to hydraulic fracture." *Id.* at Ex. 3.

52. Where hydraulic fracturing is used as part of the drilling and completion process, an average of only 5% of the oil in place is recovered from unconventional reservoirs such as shales, and about 12% from conventional reservoirs. By contrast, UBD can recover between 20% – 40% from the reservoir. *Id.* at ¶ 9. In other words, hydraulic fracturing is not the most effective or economical completion technology to recover hydrocarbons. *Id.*

53. Mr. Hughes disagrees with statements in the Plaintiffs' affidavits that allege that only wells that are completed with hydraulic fracturing are "economic" in Colorado or elsewhere. He notes that the Florence Field produced for a century before the fracking process was developed. He and his company have worked with operators who use UBD, do not hydraulically fracture wells, and have experienced excellent results. *Id.* at ¶ 10.

54. The three largest oil services companies in the world, Halliburton, Schlumberger and Weatherford, all have UBD divisions. *Id*. at ¶ 11. Weatherford has used UBD in New York State – where hydraulic fracturing is prohibited in horizontal wells – and has seen a 4 fold increase in productivity using UBD rather than fracking. Ex. 2 to Ex. 44. Shell Oil Company uses the UBD technique in many of its wells and notes similar benefits and cost reductions. Shell states that "underbalanced drilling" has the potential to improve well production by up to 800%, and that "in 2011, Shell drilled about 80% of North American tight gas wells using this technique and saved millions of dollars compared to conventional methods." Ex 3 to Ex. 44.

55. Different companies use different parameters to determine whether a well is economic or not. Economic wells have been drilled *without* hydraulic fracturing, including wells drilled with the UBD technique. *Id*. at ¶ 12. Likewise, there are many wells that have been completed using hydraulic fracturing that become uneconomic in a few months. Thus, hydraulic fracturing is not the *only* completion technology which would result in a producing or economic well. Ex. 44, ¶ 12; Exs. 45-47; Ex. 3, pp. 73-76. UBD is a viable alternative to hydraulic fracking. "That technique will cause less damage to the formation during the drilling process, and will enable those reservoirs which are encountered to produce hydrocarbons at greater rates than are being achieved with hydraulic fracturing." *Id*. ¶ 13.

56. Another method of completing wells without hydraulic fracking is "propellant well stimulation." *See* Exhibit "50" hereto. Ms. Denomy relates that other alternatives to fracking are being developed in Europe and America. Denomy Aff., ¶ 10 (Ex. B to Citizen Intervenors' Consolidated Response to SJ Motions).

57. TOP's vice president, Murray Herring, confirmed that wells could be completed without hydraulic fracturing, and wells are "nonetheless able to produce". Ex. 2, pp. 32-33. He had not done any research to d*et*ermine how wells operated by companies other than TOP Operating were completed in the Wattenberg Field, and whether hydraulic fracturing was used in those wells. *Id.*, p. 45. Mr. Seidle's analysis of fracking did not include wells outside of the Wattenberg Field or any wells drilled prior to 2004. Ex. 4, p. 37. Yet, 19% of the wells in his search of COGCC data did not have "frac" in the well report. *Id.* Mr. Seidle and Synergy's CEO, Mr. Holloway agreed, the industry is always evolving, and will continue to do so. Ex. 4, pp. 96-97; Ex. 9, pp. 12-121.

I. Article XVI Has Had Little Economic Impact on Any Statewide Interest

58. Since Article XVI, Synergy has actually permitted and begun drilling wells that are partly in Longmont, and also Firestone; Synergy simply does not frack the wellbores under the City. Exs 40 and 41.

59. Article XVI has not caused Synergy any damages. Ex. 9, pp. 44-46. Its profits have nearly doubled (up 89%) during the last year while Article XVI has been in effect. *Id.* at p. 45.[7]

60. As noted, Longmont contributes very little oil and gas production to the total produced in Colorado and receives a very small amount of tax revenue from those wells, approximately .06% of its total budget. Denomy Aff. ¶ 11.

[7] Nor has Article XVI caused "waste", which Mr. Holloway defined as meaning that Synergy would not be able to make as much profit as he would like from the Union or other well sites. Ex. 9, p. 117.

61. In addition to individual and environmental costs, the costs a community like Longmont will bear that can be attributed to fracking must be factored into a determination of the "cost" of Article XVI. The fracking boom has brought not only environmental costs, but social costs such as higher crime, alcohol and drug abuse, emergency room visits and heavy trucks crowding local roads. Ex. 38. One study found that such "social impacts were especially pronounced in counties with the highest density of shale gas wells." *Id.,* p. 2.

62. Plaintiffs have produced no documents which show that any provision of the Article XVI has impeded any operations within the City, that any COGA member has suffered injury-in-fact, or that the state's interest has been materially impeded or destroyed. TOP has received a permit to drill a replacement well for the Rider Well; however, the COGCC has not issued the state permit. *See* Exhibits "48" and "49" hereto; Ex. 2, pp. 115-18.

III. RESPONSE TO PLAINTIFFS' "UNDISPUTED" FACTS

Below are the City's responses to the "undisputed facts" alleged in each of the Plaintiffs' motions.

A. COGA Summary Judgment Brief, Section III, pp. 3-6.

1. The City disagrees that the Report of the Commission, including the Proposed Statement of Basis and Purpose, is admissible evidence. The City also disputes that the fluids used in hydraulic fracturing contain only a "small percentage of chemical additives", since no proof has been provided. Even a "small percentage" of 7.8 million gallons is significant.

2. The City disputes that COGA provided evidence that "hydraulic fracturing has been used to complete wells in Colorado for many decades, and tens of thousands of wells have been hydraulically fractured in Colorado. *See* Statement of Facts ("SOF"), Parts II.G., H. The

City disputes that ¶ 5 of the Affidavit of Murray Herring is competent evidence, since Mr. Herring had no knowledge to support the quoted statement from ¶ 5 of his Affidavit.

3. The City does not know on what basis the Commission made the findings described in ¶ 3, and therefore disputes those findings. *See also* SOF, Parts IV.D.1.b., *infra*. Furthermore, many hydrocarbon-bearing formations in Colorado do produce "economic quantities" of oil and gas without hydraulic fracturing. The City also disputes the meaning of "economic quantities" since it is not defined in the Commission Rules and is inherently ambiguous since each company defines "economic" differently.

4. The City denies that Dr. Ingraffea ever made the statement that is attributed to him in paragraph 4. Because TOP Operating has not provided documents which describe its definition of "economically drill and complete these wells", the City disputes paragraph 5.

5. The City disputes that the Commission "permits hydraulic fracturing performed in accordance with its Rules", since the Commission's Rules do not regulate or contain any parameters concerning hydraulic fracturing.

6. Admit.

7. The City denies the characterization of Exhibits 4 and 5 to COGA's Motion. Those statements speak for themselves and COGA has inaccurately attempted to restate them.

8. Admit.

9. Admit that City Charter Article XVI is accurately quoted, in part. This is only a partial quote of section 16.2.

10. City Charter Article XVI speaks for itself.

11. The City does not understand what is meant by "[h]ydrocarbon-bearing formations do not conform to political boundaries on the surface." Deny the remaining portions of paragraph 11, and note that Synergy has given up its right to hydraulically fracture the wells that are mentioned by entering into an agreement with the City which is Exhibit 42 to the City's Response. In addition, Mr. Holloway admitted that Synergy had relinquished rights to hydraulically fracture its proposed horizontal wells within the City of Longmont. Ex. 9, pp. 106-09; Ex. 42, ¶ 5.

12. Denied. Synergy has actually drilled (but not fracked) several of the "Commission-permitted wells" under the City's borders. *Id.*; Exs. 40, 41.

B. TOP Motion for Summary Judgment, pp. 2-5.

1. The City is without sufficient knowledge to determine where TOP's "principal holdings" are located, or how "principal holdings" is defined by TOP. The City is without sufficient knowledge to determine whether TOP has the "exclusive" leasehold right to develop numerous oil and gas reserves. The City agrees that TOP operates between 10 and 12 current producing wells, and states that there are other operators who have leasehold rights within Longmont such as Encana, Anadarko, and Synergy. The City has insufficient information to know whether TOP's oil and gas reserves are "particularly low risk and profitable", and notes that TOP and its predecessors in title failed to develop those reserves for many years, which would indicate that they are not "profitable."

2. The City disputes that "all wells drilled by TOP and virtually, if not all, of [*sic*] wells drilled by other operators in the Wattenberg Field have been completed with hydraulic fracturing and hydraulic fracking is a standard and essential industry practice." Parts II. G. and

H. Mr. Herring had no basis for most of the statements in his affidavit. The City also disputes the "Proposed Statement of Basis, Specific Statutory Authority, and Purpose" described in paragraph 2.

3. The City does not know where TOP's oil and gas reserves are located and therefore denies paragraph 3.

4. The City admits that TOP has interests in various oil and gas leases and has insufficient information to determine whether TOP has the "sole and exclusive right" to develop those leases. The City agrees that it entered into the referenced Master Contract and the Operator's Agreement, which speak for themselves.

5. The City has insufficient information to determine whether TOP "wished to fully exercise its exclusive rights under its Oil and Gas Leases" and states that TOP and its predecessors failed to develop those leases for a period of over 30 years before the Longmont Code was amended by Article XVI. The City has insufficient information to know what TOP plans to do, and disputes that it "cannot economically drill and complete" wells without using hydraulic fracturing. Denomy Aff, ¶ 7 (demonstrating that the wells operated by TOP are, at best, marginal.)

C. Colorado Oil and Gas Conservation Commission Summary Judgment Brief, "Undisputed Facts and Relevant Authorities," pp. 3-7.

1. Admit that the COGCC has quoted a portion of Article XVI.

2. Admit that the COGCC has accurately quoted a portion of Article XVI.

3. Denied.

4. Admit that the COGCC has accurately quoted a portion of the Colorado Oil and Gas Act, and has failed to quote other relevant portions of the Act. The City specifically states that the Oil and Gas Act does not vest the Commission with the authority to regulate hydraulic fracturing, and further states that the Commission does not regulate that completion practice. *See* Parts II.B., *supra* and IV.B., *infra*.

5. Admit that the Commission has accurately quoted a portion of the Act, and, upon information and belief, states that the Commission does not enforce the quoted section.

6. Denied. The City specifically states that the cited statute does not give the Commission authority to regulate hydraulic fracturing and further states that the Commission does not have rules which regulate hydraulic fracturing. The City further states that the Commission does not regulate hydraulic fracturing, as evidenced by the deposition testimony of Stuart Ellsworth, Ed Holloway, and John Seidle. *See* Parts II.B, *supra* and IV.B., *infra*.

7. Admit that the Commission has accurately quoted a portion of the Commission's Rules.

8. Denied.

9. Admit that the Commission has accurately quoted a portion of the Act. The City additionally states that the Commission's Rules do not regulate hydraulic fracturing and that the Commission's own "COGCC Hydraulic Fracturing Rules" do not list "E&PW waste" as having any relationship to hydraulic fracturing. *See* Parts II.B, *supra* and IV.B., *infra*.

10. The City denies the Commission's attempts to paraphrase portions of Commission 900 Series Rules, which are 21 pages in length.

11. The cited rules speak for themselves.

12. The City did not participate in the August 1989 "EPA Agreement", and states that it does not know whether the EPA Agreement is still in effect. Further, the EPA Agreement speaks for itself.

13. Denied. There are no Class II Wells in the City, or permit requests to create such wells.

14. Admit that there are 10 to 12 producing wells in the City and that there are no Class II Wells in the City. Deny that all wells have been hydraulically fractured at least once or more than once. *See* Parts II.H. and G., *supra*; Exs. 44, ¶'s 7-10, 13 and Exs. 45-47.

15. Deny. *See* Parts II.H. and G., *supra*; Exs. 44, ¶'s 7-10, 13 and Exs. 45-47.

16. Deny. *See* Parts II.H. and G., *supra*; Exs. 44, ¶'s 7-10, 13 and Exs. 45-47. Further deny paragraph 16 on the basis that the quoted testimony of Murray Herring is incompetent to provide such testimony, since Mr. Herring had no information about whether other wells in the Wattenberg Field had been hydraulically fractured or were "economic".

17. Deny. Synergy voluntarily relinquished its right to hydraulically fracture certain wells under the City as part of its agreement with the City as set forth in the "Synergy Road Access to Union 11-5D Site Revocable Permit and Agreement", which is Exhibit 42 hereto. Mr. Holloway confirmed this fact. Ex. 9, pp. 106-109. Admit that the City has not designated "an area of state interest" under the AASIA, and that the Commission therefore lacks authority to administer any area within Longmont under the AASIA.

IV. ARGUMENT

In this Argument, the City first (in Part IV.A) describes the Plaintiffs' five burdens of proof for their SJ Motions. Part IV.B shows that there is no conflict – express, implied, or otherwise – between Article XVI and federal or state law or regulations. Part IV.C conducts the home rule analysis required by *Webb* and other Supreme Court cases, explaining why the City's interest outweighs the State's interest under the facts and circumstances of this case. Part IV.D describes controlling Supreme Court precedent on the need for Plaintiffs to prove an operational conflict with state law after compiling a fully developed evidentiary record, which they have not done. Parts III.E and III.F respond to Plaintiffs' arguments on the Areas and Activities of State Interest Act and takings under the eminent domain statute, respectively. Ultimately, this Part IV concludes that many disputes of material fact prevent the Plaintiffs from receiving summary judgment in their favor.

A. THE PLAINTIFFS DO NOT MEET THEIR FIVE BURDENS OF PROOF

For their SJ Motions to prevail, the Plaintiffs must meet the following burdens: (1) to prove Article XVI invalid beyond a reasonable doubt; (2) to prove that there is no material fact in dispute; (3) to prove that Article XVI conflicts with state law; (4) to prove that Article XVI is not a matter of local concern based on the totality of the circumstances; and (5) to prove that Article XVI is in an *operational* conflict with state law, meaning that it materially impedes or destroys the state's interest in oil and gas production, based on a fully developed evidentiary record. Plaintiffs have not met any of these burdens.

First, as a legislative enactment, a municipal charter amendment is generally presumed to be valid and a challenging party has the burden of proving it invalid *beyond a reasonable doubt*.

Sellon v. City of Manitou Springs, 745 P.2d 229, 232 (Colo. 1987); *Tri-State Generation & Transmission Co. v. City of Thornton*, 647 P.2d 670, 677 (Colo. 1982).

Second, a movant for summary judgment must prove that no material fact is in dispute. C.R.C.P. 56(c). "Summary judgment is a drastic remedy and is never warranted except on a clear showing that there exists no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Bd. of Cnty. Comm'rs of Gunnison Cnty. v. BDS Int'l, LLC.*, 159 P.3d 773, 778 (Colo. App. 2006) ("*BDS*"). Due to the "drastic" nature of the remedy, "the absence of dispute as to all issues of material fact must be clearly shown, and all doubts as to the presence of disputed facts must be resolved against the moving party." *KN Energy, Inc. v. Great W. Sugar Co.*, 698 P.2d 769, 776 (Colo. 1985); *accord Amos v. Aspen Alps 123, LLC*, 2012 CO 46, ¶ 13, ("The nonmoving party is entitled to the benefit of all favorable inferences that may be drawn from the undisputed facts, and all doubts as to the existence of a triable issue of fact must be resolved against the moving party.").

Third, any state preemption challenge requires a conflict between state and local law. *Bd. of Cnty. Comm'rs, La Plata Cnty. v. Bowen/Edwards Associates, Inc.*, 830 P.2d 1045, 1055 (Colo. 1992) ("*Bowen/Edwards*") ("The purpose of the preemption doctrine is to establish a priority between potentially conflicting laws enacted by various levels of government."). If there is no such conflict, a local law is not preempted.

Fourth, Plaintiffs are challenging Longmont's power to regulate matters within its own borders, a power granted to it by the Colorado Constitution. Colo. Const. art. XX, § 6. Home rule city laws supersede state law within the city's territory. *Id.* ¶ 2. State law does not generally preempt a home rule city ordinance; preemption occurs only when the regulated matter is *not a*

matter of local concern, and even then only in certain circumstances. *Voss v. Lundvall Bros., Inc.*, 830 P.2d 1061, 1066 (Colo. 1992) ("*Voss*"). So, to defeat the City's home rule authority at summary judgment, the Plaintiffs must prove that Article XVI is not a matter of local concern based upon undisputed facts before the Court. Whether a regulated matter is of local, state, or mixed concern depends on an ad-hoc analysis of *facts*, viewed among the "totality of the circumstances" of the case. *Webb v. City of Black Hawk*, 2013 CO 9, ¶ 16. Relevant circumstances specifically include "time, technology, and economics." *Id.* ¶ 38.

Fifth, Plaintiffs must prove an *operational* conflict. *Bowen/Edwards*, 830 P.2d at 1060; *Bd. of Cnty. Comm'rs, LaPlata Cnty. v. Colorado Oil & Gas Conservation Comm'n*, 81 P.3d 1119, 1125 (Colo. App. 2003) (Overturning COGCC rule because "The words 'any conflicting' . . . have much broader meaning than 'operationally conflicting' . . . ."). A conflict is an operational conflict "where the effectuation of a local interest would materially impede or destroy the state interest." *Id.* at 1059. This is another fact-intensive inquiry; the plaintiffs can *only* prove operational conflict "on an ad-hoc basis under a fully developed evidentiary record," after which this Court must make "appropriate findings of fact." *Id.* at 1060. The evidentiary record in this case is not fully developed, and one reason why Article XVI does not impede the state interest is because alternatives to hydraulic fracking preserve the state's interest in a balance between production and protection of human health, safety, welfare, and the environment.

Plaintiffs must meet all five of these burdens to prevail at summary judgment. For example, even if Article XVI were potentially a matter of mixed rather than local concern, Plaintiffs would still have to prove beyond a reasonable doubt and beyond a factual dispute that Article XVI is in operational conflict with state law. *Bowen/Edwards*, 830 P.2d at 1060.

B. THE PLAINTIFFS HAVE NOT DEMONSTRATED A PREEMPTIVE CONFLICT BETWEEN ARTICLE XVI AND STATE OR FEDERAL LAW

This Part IV.B is divided into two subparts, the first addressing conflict with regard to Article XVI's fracking restriction and the second with regard to its fracking waste storage and disposal restrictions.

1. Plaintiffs Have Shown No Conflict Between Article XVI's Fracking Provision and State Law

A conflict between two sets of laws is a prerequisite for any preemption challenge. *See Bowen/Edwards*, 830 P.2d at 1055. Plaintiffs cannot prove preemption without identifying and demonstrating conflict. *See id.*; Part IV.D, *infra*; *City & Cnty. of Denver v. State*, 788 P.2d 764, 767 (Colo. 1990) (When a matter is of mixed state and local concern in a home rule analysis, for example, "a charter or ordinance provision of a home rule municipality *may coexist with a state statute as long as there is no conflict*." (emphasis added)).

Plaintiffs have the burden of proving both that Article XVI is not within the City's home rule authority and that it is in operational conflict with the Colorado Oil and Gas Conservation Act ("COGCA"). A shared facet of these two burdens is that Plaintiffs must prove a conflict exists.

Plaintiffs look to two sources to demonstrate a conflict: section 34-60-106(2)(b), and the Commission's regulations. Neither conflicts with Article XVI.

a. Section 34-60-106(2) Does Not Give Rise to Implied Conflicts with Local Laws

Section 34-60-106(2), C.R.S. (2013) provides:

The commission has the authority to regulate:

> (a) The drilling, producing, and plugging of wells and all other operations for the production of oil or gas;
> (b) The shooting and chemical treatment of wells;
> (c) The spacing of wells; and
> (d) Oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility.

Plaintiffs focus on (b) of this section, argue that fracking falls under both "shooting" and "chemical treatment," and conclude that the City has no authority to regulate fracking. COGA SJ Brief at 14; COGCC SJ Brief at 2, 4, 9; TOP SJ Motion at 6. One problem for Plaintiffs, examined below in Part IV.B.1.b, is that fracking is not defined as either of those terms. But a more fundamental problem with Plaintiffs' argument is that section 34-60-106(2) is not a preemptive subsection because it does not prohibit local governments from regulating alongside the state.

Plaintiffs consider *Colorado Min. Ass'n v. Bd. of Cnty. Comm'rs of Summit Cnty.*, 199 P.3d 718 (Colo. 2009) (*Colorado Min. Ass'n* or *Summit County*), a "case on all fours" and "directly applicable to the present case," proving preemption. TOP SJ Motion at 16-17. In that case, the Supreme Court held that a county ban on heap-leach mining was impliedly preempted by the Mined Land Reclamation Act (MLRA). Characterizing Article XVI as a "ban," Plaintiffs claim that it is similarly impliedly preempted. COGA SJ Brief at 16-18; COGCC SJ Brief at 10.

The *Summit County* case is indeed instructive but not for the reason Plaintiffs claim. Unlike the COGCA, the MLRA expressly vested the regulatory agency "s*ole* authority" to regulate the activity the county banned:

> *No governmental office of the state, other than the board, nor any political subdivision of the state* shall have the authority . . . to require reclamation standards different than those established in this article . . . .

Summit County, 199 P.3d at 727 (emphasis altered) (quoting § 34-32-109(6), C.R.S. (2008)). The Court emphasized the exclusive nature of the statutory authority in its holding: "The Board further argues that the General Assembly granted the Board *sole* authority . . . and did not grant statutory counties, like Summit County, the authority to set such standards. We agree with the Board's implied preemption contention." *Id.* at 730 (emphasis added).

In sharp contrast to the MLRA, the COGCA does not give the COGCC sole and exclusive authority to regulate any of the activities described in section 34-60-106(2). The distinction is obvious and critical. *See In re Entergy Corp.*, 142 S.W.3d 316, 321 (Tex. 2004) ("An agency has exclusive jurisdiction when the Legislature has granted that agency the sole authority . . . ."). Just because the legislature allows a state agency to regulate does not mean that local governments cannot also regulate in the same area. The only exception is when the legislature has occupied the entire field, crowding out all local regulation, which has been determined not to be the case here. *Bowen/Edwards*, 830 P.2d at 1056-57.

As the *Bowen/Edwards* court explained:

> There are three basic ways by which a state statute can preempt a county ordinance or regulation: first, the express language of the statute may indicate state preemption of all local authority over the subject matter; second, preemption may be inferred if the state statute *impliedly* evinces a legislative intent to completely *occupy a given field* by reason of a dominant state interest; and third, a local law may be partially preempted where its operational effect would conflict with the application of the state statute.

Bowen/Edwards, 830 P.2d at 1056-57 (Colo. 1992) (emphasis added and citations omitted).

The Supreme Court went on to explain that the COGCA does not preempt in either the first or the second way – express or implied preemption. *Id.* at 1057-59. Accordingly, the COGCA can preempt a local law *only* if the two are shown to be in operational conflict.[8] *Id.* at 1059-60. In other words, the Supreme Court has already held that the COGCA, including section 34-60-106(2), creates no express or implied conflict with local laws. By introducing an implied preemption argument, Plaintiffs are attempting to shortcut the operational conflict analysis *Bowen/Edwards* requires. *See* Part IV.D, *infra*.

Plaintiffs' reading of section 34-60-106(2) runs afoul of *Bowen/Edwards* in another way as well. The subsection also allows the COGCC to regulate "drilling, producing, and plugging of wells and *all other operations* for the production of oil or gas," as well as "[*o*]*il and gas operations* so as to prevent and mitigate significant adverse environmental impacts." (Emphasis added). If those provisions somehow gave COGCC *sole* authority over those activities, then local government would effectively be unable to regulate oil and gas operations *at all*, including for land use or other environmental purposes. Instead, the Supreme Court held there was *no*

> implied legislative intent to preempt all aspects of a county's statutory authority to regulate land use within its jurisdiction merely because the land is an actual or potential source of oil and gas development and operations. The state's interest in oil and gas activities is *not so patently dominant* over a county's interest in land-use control, nor are the respective interests of both the state and the county so irreconcilably in conflict, as to eliminate by necessary implication any prospect for a harmonious application of both regulatory schemes.

Bowen/Edwards, 830 P.2d at 1058 (emphasis added). The other, broader powers given to the COGCC in section 34-60-106(2) clearly do not, according to our Supreme Court, have the

[8] These are the *methods* of preemption which apply equally to home rule cities and statutory local governments. However, for a law of a home rule city to be preempted, it must *also* be shown to fail under a constitutional home rule analysis.

dominant, preemptive effect of giving sole authority over those operations to the COGCC. Plaintiffs provide no reason why section 34-60-106(2)(b) would be any different.

The court's clear holding in *Bowen/Edwards* is that the COGCA, including section 34-60-106(2), does not expressly or impliedly (by occupying the field) preempt local land use regulation of oil and gas operations. This accords with the plain language of the COGCA, which grants authority (to a state agency) yet does not revoke it (from local governments). *See Vigil v. Franklin*, 103 P.3d 322, 327 (Colo. 2004) ("Our primary duty in construing statutes is to give effect to the intent of the General Assembly, looking first to the statute's plain language.").

TOP's discussion of *Town of Milliken v. Kerr-McGee Oil & Gas Onshore LP*, 2013 COA 72, is inapposite. That case involved express preemption under 1996 legislation specific to fees. *Id.* ¶ 3. The relevant legislation begins, "No local government may charge a tax or fee to conduct inspections . . . ." *Id.* Plaintiffs identify no such expressly preemptive language relevant to this case.

b. Hydraulic Fracturing is Not Shooting or Chemical Treatment

Under Plaintiffs' own definitions, hydraulic fracturing is not encompassed in the definition of either "shooting" or "chemical treatment." Plaintiffs define hydraulic fracturing as:

> an operation in which a specially blended liquid is pumped down a well and into a formation under pressure high enough to cause the formation to crack open, forming passages through which oil can flow into the wellbore. Sand grains, aluminum pellets, glass beads, or similar materials are carried in suspension into the fractures. When the pressure is released at the surface, the fractures partially close on the proppants, leaving channels for oil to flow through to the well. **Compare *explosive fracturing***.

Ex. 1 to COGCC SJ Motion, at 7 (p. 127 of *A Dictionary for the Oil and Gas Industry*).

According to Plaintiffs' own definitions, to "shoot" is "1. to explode nitroglycerine or other high explosives in a hole to shatter the rock and increase the flow of oil*;* now largely ***replaced by formation fracturing***. 2. in seismographic work, to discharge explosives to create vibrations in the earth's crust." *Id.* at 8 (p. 244 of *A Dictionary for the Oil and Gas Industry*) (emphasis added). Hydraulic fracturing uses liquid; shooting uses "high explosives." Hydraulic fracturing "replaced" shooting, and the dictionary contrasts hydraulic fracturing with "explosive fracturing." *Accord* Okla. Stat. tit. 63, § 128.5; Joe Schremmer, *Avoidable "Fraccident"*, 60 U. Kan. L. Rev. 1215, 1249 (2012) ("A predecessor of fracking, well shooting was a technique for enhanced oil recovery in which producers exploded nitroglycerin at the bottoms of wells to free trapped oil."). Plaintiffs' own expert engineer defines shooting as "a now archaic completion procedure of shooting the well with nitroglycerine." Ex. 4 at 84-85. It is clearly distinct from hydraulic fracturing.

Plaintiffs define "chemical treatment" as "any of many processes in the oil industry that involve the use of a chemical to effect an operation. Some chemical treatments are acidizing, crude oil demulsification, corrosion inhibition, paraffin removal, scale removal, drilling fluid control, refinery and plant processes, cleaning and plugging operations, chemical flooding and water purification." COGCC SJ Motion Ex. 1, at 3 (p. 44 of *A Dictionary for the Oil and Gas Industry*). Hydraulic fracturing, despite its supposed centrality to the industry's success, is not listed as an example of chemical treatment. It is easy to understand why: Plaintiffs' own definition of hydraulic fracturing, above, *does not require chemicals*. Chemicals do not appear in the definition, and that makes sense. The essence of the words "hydraulic fracturing" is that liquid is pumped into a well and pressurized, to fracture rock formations. While chemicals might

or might not aid the process, to call the *whole process* "chemical treatment" is to try to fit a square peg into a round hole.[9] At best, chemicals are a minor component of the process.

Hydraulic fracturing is instead a distinct process which the General Assembly has never written into the COGCA. The Act gives the COGCC no explicit or direct authority to regulate hydraulic fracturing whatsoever, and certainly does not revoke the right of a city to regulate the process. And, as every deponent testified (including COGCC's manager of permits), the Commission does not issue fracking permits or regulate what wells may be fracked and what fluids may be used. *See* Part II.B., *supra*; Part IV.B.1.c.iii, *infra*.

Accordingly, Article XVI does not "negate a more specifically drawn statutory provision the General Assembly has enacted." *Summit County*, 190 P.3d at 730. *Contra* COGCC SJ Brief at 10.

c. COGCC Regulations Do Not Conflict with Article XVI

Plaintiffs argue that the rules of the COGCC conflict with Article XVI. But despite their laundry lists of COGCC rules, and their statement that the rules "use the term 'hydraulic fracturing' at least 41 times," they never point out a single rule that actually regulates fracking or creates any single conflict between the rules and Article XVI. TOP SJ Motion at 6-8; COGA SJ Brief at 19-22 (quoted language at 19); COGCC SJ Brief at 10. Plaintiffs' claims that the rules "explicitly authorize[]," "extensively authorize[]," and "expressly permit[]" hydraulic fracturing do not withstand scrutiny. COGCC SJ Brief at 10; COGA SJ Brief at 19; TOP SJ Motion at 6.

[9] According to the industry's FracFocus.org website, water comprises about 99.2% of the "Average Hydraulic Fracturing Fluid Composition for US Shale Plays." Another industry link states that "water accounts for about 90% of the fracturing mixture and sand accounts for about 9.5%. Chemicals account for the remaining one half of one percent of the mixture." Energyfromshale.org.

Instead, the COGCC's rules amount to *non-regulation* of hydraulic fracturing. They never authorize the practice. The COGCC does not issue permits for it. Ex. 3, p. 70. The *drilling* permit from the COGCC does not "tell the operator yes, you are allowed to hydraulically fracture or, no, you're not allowed"; it's up to the operator to make that decision. *Id.* Operators do not need to request the ability to frack, and there is no framework in the rules that would allow the COGCC to deny an operator the ability to frack. *Id.* at 134. The rules do not prescribe technical conditions for the practice, or restrict it whatsoever. Part II.B. *supra*. The rules require *notification* of fracking to the COGCC and landowners, but provide for zero *regulation* of the practice. Regulation is "[t]he act or process of *controlling* by rule or *restriction*." REGULATION, Black's Law Dictionary (9th ed. 2009) (emphasis added). The COGCC's rules may use the words "hydraulic fracturing," but they do not control it nor restrict it. The process is left to the oil company's discretion. *Accord* Ex. 3, pp. 113-114; Ex. 4, pp. 55-58; Section II.B., *supra*.

A test for conflict identified by the Plaintiffs is whether the local law "authorizes what state statute forbids, or forbids what state statute authorizes." TOP SJ Motion at 16 (quoting *Webb*, 2013 CO 9); COGA SJ Brief at 7; COGCC SJ Brief at 15. But the COGCC rules never permit hydraulic fracturing, "expressly," "explicitly," "extensively" or otherwise. Without saying so, Plaintiffs are asking this Court to hold that the Commission, by virtue of having any rules whatsoever involving hydraulic fracturing, has occupied the entire field of hydraulic fracturing regulation, crowding out the ability of any local government to regulate it.

Other than in the COGCC's Definitions (100-series of the rules), Plaintiffs note that fracking is mentioned in Rules 205, 205A, 305.c, 316C, and 805.c. TOP SJ Motion at 6-8; COGA SJ Brief at 19-22. The other rules Plaintiffs cite do not discuss or even mention fracking.

i. COGCC Rules Which Mention Hydraulic Fracturing

Rule 205 mentions hydraulic fracturing (5 times), only to specifically *exclude* fracking chemicals from a chemical inventory operators must maintain at each well site. Certainly that is not regulation of hydraulic fracturing.

Rule 205A uses the term (20 times) and requires an operator to report chemicals used in fracking, with the exception of trade secrets, to a non-governmental online registry. The rule includes no regulation of chemicals' use or concentration, or the fracking process.

Rule 305.c uses the term (twice) and requires that when operators notify surrounding owners of impending oil and gas activities, they must include "[t]he COGCC's information sheet on hydraulic fracturing treatments," the two page document included as Exhibit 2 to COGA's SJ Motion, "except where hydraulic fracturing treatments are not going to be applied to the well in question." Supplying an information sheet does not restrict or regulate the activity of fracking whatsoever.

Rule 316C requires operators give 48 hours' notice to the Commission before fracking a well. Again, this is notification rather than regulation. The rule uses the term 3 times.

Rule 805.c names, as one potential technique to control fugitive dust at oil and gas sites, "silica dust controls when handling sand used in hydraulic fracturing operations." This is a minimal and apparently optional technique, remotely connected to the practice of hydraulic

fracturing, designed more to mitigate nuisance concerns about dust rather than the act of hydraulic fracturing itself. The rule uses the term once.

The definitions refer to "hydraulic fracturing" ten times, but do not create any independent rules. That adds up to 41 references to the relevant terminology (as COGA says), but a grand total of zero substantive regulations controlling or restricting the act of using fluids under pressure to force open fractures in geologic formations. The activity is essentially unregulated. By contrast, there are indeed COGCC rules which specifically regulate oil and gas operations down to the level of the size of "location signage" (2'x2') in Rule 305.g., the submission of wellbore diagrams in Rule 314, keeping sites free of "weeds and trash" in Rule 603.g., to name a few. The absence of any comparable rules for fracking speaks volumes.

ii. COGCC Rules Plaintiffs Cite Which Do Not Mention Hydraulic Fracturing

The remainder of the Plaintiffs' attempts to find a conflict between the rules and Article XVI depend on rules which *do not even mention hydraulic fracturing*:

Rule 207 allows the COGCC "to require that tests or surveys be made to determine the presence of waste or occurrence of pollution." Plaintiffs do not describe how this amounts to regulation of hydraulic fracturing in theory or practice, or the extent to which the COGCC invokes the rule. Plaintiffs do not explain how the rule could possibly conflict with Article XVI, much less how it conflicts in a preemptive manner. Certainly Article XVI does not forbid anything Rule 207 permits, or vice versa.

Rule 308B requires that operators complete a form called a Completed Interval Report within thirty days of completing a well. "Completion" is defined generally as the time when the

well produces its first hydrocarbons from the ultimate production zone. Rule 100. The definition does not involve hydraulic fracturing. The Completed Interval Report appears to collect information on such activities as fracking, but contains no regulation of the practice. Stuart Ellsworth, the COGCC's Engineering Manager and affiant, has explained that the COGCC's only role in reviewing a Completed Interval Report per Rule 308B is to make sure it is filed in a timely manner. Ex. 3, p. 14.

Rule 317, "General Drilling Rules," generally requires well casing "to protect any potential oil or gas bearing horizons penetrated *during drilling* from infiltration of injurious waters from other sources." COGCC Rule 317.d (emphasis added). As deposition testimony makes clear, fracking is not part of drilling. Ex. 3, p. 19 (drilling, completion and production are three separate phases of "well construction"). Completion, but not fracking, is addressed only in Rule 317.j which requires production casing to be "adequately pressure tested," although it is not clear by whom, "for the conditions anticipated to be encountered during completion and production operations." Mr. Ellsworth says this rule attempts "to make sure the treatment stays in the wellbore and the formation that's being treated." Ex. 3, p. 112. It was not developed specifically for hydraulic fracturing. *Id.* It simply tells operators to make their cement and steel casings strong enough for all their operational purposes, without any description of what strengths are necessary to support fracking operations or what pressures the casings must be able to withstand.

Rule 318A.e(4) requires groundwater monitoring in some situations, but does not affect the activity of hydraulic fracturing.

Rule 341, like rule 317, just says that "stimulation fluids shall be confined to the objective formations during treatment to the extent practicable." "Stimulation" is not defined. The rule also requires monitoring of pressures at the wellhead, a requirement which is not specific to hydraulic fracturing, places no control or restriction on the practice of hydraulic fracturing, and does not involve matters Article XVI addresses.

Rule 523 is about fines, and contains no restrictions itself. Similarly, Rule 703 is about financial assurances – for crop or land damage, not human health or other impacts – rather than hydraulic fracking or other operations.

Rules 802 and 804 discuss noise and light pollution and apply to oil and gas operations generally, having nothing to do with fracking specifically.

The remaining COGCC rules cited by Plaintiffs appear to address the fracking waste restriction also included in Article XVI, but not the practice of or prohibition on fracking itself. This issue is discussed below, in Part IV.B.2.b. See COGCC Rules 323, 324A, 325, 326, 604.c(2)(B),901-08, 1001-04.

iii. Deposition Statements Regarding COGCC Rules

Just as important as what the COGCC Rules say is what they omit.

Stuart Ellsworth, the top engineer at the COGCC, who is tasked with applying the COGCC rules, summarized the rules in his deposition. "The Commission does not issue permits which explicitly state that an operator is allowed to conduct hydraulic fracturing operations." Ex. 3, p. 70. No rule regulates what kinds of chemicals an operator can use in fracking operations. *Id.*, p. 113; Ex. 4, pp. 54-55. No rule regulates the amount of fluid that can be used to frack. *Id.* No rule regulates the number of times a well can be fracked, or the number of

stages – lengths of the well bore – that can be fracked in a well. *Id.* No rule gives any framework that allows the COGCC to deny an operator the ability to frack. *Id.*; Ex. 3, p. 134. *See generally* Section II. B, *supra*.

iv. Plaintiffs Fail to Show that COGCC Rules Conflict with Article XVI as a Matter of Law

For Article XVI to survive, the City need not prove that the COGCC totally fails to regulate any aspect of oil and gas operations connected to fracking. Instead, it is part of the Plaintiffs' burden to prove that a *conflict* exists between Article XVI and COGCC regulations. The COGCC never issues any permit, or has any rule, saying that fracking is authorized, or not. The COGCC has not forbidden fracking, but it has not authorized it either. The agency in charge of oil and gas regulation is *silent* on whether fracking is allowed, and has abdicated that decision to the oil companies. Sec. II.B., *supra*. A test for conflict – one of the several building blocks of preemption – in this case is whether the City is forbidding what the State permits or permitting what the State forbids.

Very clearly, the State has not *expressly* permitted fracking, as Plaintiffs claim. So Plaintiffs ask the Court to *imply* a preemptive effect from the COGCC rules. In doing so, they ignore the meaning of implied preemption: it occurs where a *statute "*evinces a legislative intent to *completely occupy a given field*." *Bowen/Edwards*, 830 P.2d at 1056-57 (Colo. 1992) (emphasis added). The Rules are not statutes; they do not and should not have the same preemptive effect as statutes. And, as has already been held, the Rules at issue here do not occupy the field of oil and gas operations. *Id.* at 1058.

Failing to show that the COGCA occupies the "field," Plaintiffs then attempt to reframe the issue, to "narrow[] the scope" of the "given field," changing the scope of the "field" from oil and gas operations generally to fracking operations specifically. COGCC SJ Brief at 9. The COGCC is the only one of the Plaintiffs to attempt this rhetorical maneuver, and it is telling that the COGCC is also the only one of the Plaintiffs not to discuss any specific COGCC rule. *See id.* at 10 (referring to the whole of the COGCC's rules rather than any single one). One reason is that, adding up the few COGCC rules that bother to mention hydraulic fracturing, they do not amount to a comprehensive body of regulation of any substantive aspect of the fracking process, crowding out other attempts at regulation. Involving only notification and provision of information, they are no more impliedly preemptive of a fracking restriction than the full set of rules is impliedly preemptive of all local regulation of oil and gas activities.

Finally, the rules themselves provide that they do not impliedly preempt local laws, but that, as *Bowen/Edwards* held, preemption can occur only by *operational* conflict:

> Nothing in these rules shall establish, alter, impair, or negate the authority of local and county governments to regulate land use related to oil and gas operations, so long as such local regulation is not in *operational conflict* with the Act or regulations promulgated thereunder.

COGCC Rule 201. This rule has existed in its current form since 2009, after a Court of Appeals decision in 2003. A prior rule had provided that COGCC permits were "binding with respect to *any* conflicting local governmental permit or land use approval process." *Bd. of Cnty. Comm'rs, LaPlata Cnty. v. Colorado Oil & Gas Conservation Comm'n*, 81 P.3d 1119, 1125 (Colo. App. 2003) (emphasis added). The court struck the rule down as overbroad, holding that it violated *Bowen/Edwards*:

> The words "any conflicting" in the rule have much broader meaning than "operationally conflicting," as discussed in *Bowen/Edwards* and *Voss v. Lundvall Bros., supra.* . . . Thus, on its face amended Rule 303(a) would preempt local government actions beyond those that materially impede or destroy the state interest and would give oil and gas operators license to disregard local land use regulation. This result erodes the delicate balance between local interests and state interests set forth by *Bowen/Edwards.* Therefore, because the amended rule conflicts with *Bowen/Edwards,* we must set it aside.

Id. Abiding by the decision, the COGCC rules themselves now require *operational conflict*, as distinct from implied conflict, in order to raise a preemptive conflict. The COGCC's arguments about implied conflict in its brief contradict its own Rule 201.

Because neither the COGCA nor the COGCC rules expressly or impliedly conflict with Article XVI, Plaintiffs have not shown that they are entitled to relief as a matter of law.

2. Plaintiffs Have Shown No Conflict Between Article XVI's Fracking Waste Provisions and Federal or State Law

In addition to its prohibition of fracking itself, Article XVI contains a separate provision that, "within the City of Longmont, it is prohibited to store in open pits or dispose of solid or liquid wastes created in connection with the hydraulic fracturing process, including but not limited to flowback or produced wastewater and brine." Plaintiffs have identified no conflict, as a matter of law, between these local provisions and state or federal law.

a. No Conflict with Federal Law

Plaintiffs assert that the federal Safe Drinking Water Act (SDWA) preempts Article XVI, but points to no conflict between the two laws. The only law Plaintiffs cite on preemption under the SDWA is a federal district court case which found – ironically – that the federal law did *not* preempt additional state regulation of injection wells. *Bath Petroleum Storage, Inc. v. Sovas*, 309 F. Supp. 2d 357, 370 (N.D.N.Y. 2004). Although the Environmental Protection Agency

(EPA) had granted permits for the construction of an injection well, the EPA itself acknowledged that the federal Underground Injection Permit program "leaves ample room" for further regulation of the wells. *Id.* at 367.[10] The court relied in large part on the language of the SDWA statute, which provides:

> Nothing in this subchapter shall diminish any authority of a State *or political subdivision* to adopt or enforce any law or regulation respecting underground injection but no such law or regulation shall relieve any person of any requirement otherwise applicable under this subchapter.

42 U.S.C.A. § 300h-2 (West 2014) (emphasis added) (quoted in *Bath Petroleum* 309 F. Supp. 2d at 367). Plaintiffs neglect to mention this provision in their briefs, but its plain language leaves Longmont free to add restrictions to injection wells.

The provision allows local governments to *add* restrictions under the SDWA, so long as they do not *relieve* operators from restrictions the SDWA requires. Federal law allows the EPA or a state to grant a permit for injection wells, and provides that such a permit is *necessary but not always sufficient* to drill such a well. *See id.*

Federal regulations expand on this "savings clause" provision and are even more explicit about local governments' ability to further regulate injection wells:

> The issuance of a permit [for an injection well] does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or *local law* or regulations.

40 C.F.R. § 144.35(c) (emphasis added).

[10] The SDWA provides for states to initiate permitting programs for underground injection wells. 42 U.S.C. § 300h (West 2014). Complications in applying *Bath Petroleum* to the instant case arise because New York had not sought "primacy" – the right to regulate under the SDWA in lieu of the EPA, *id.* at 366 – whereas Colorado appears to have such authority. *See* Ex. 9 to COGA SJ Motion. Parallels between the cases arise because both Longmont and the State of New York are permissibly seeking to regulate injection wells outside the auspices of the SDWA.

When an operator closes an injection well, for example, it "must dispose or otherwise manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to [its] well in accordance with all applicable Federal, State, and *local regulations and requirements*." 40 C.F.R. § 144.82(b) (emphasis added).

Nothing in the SDWA overturns local zoning or police power of cities to protect the health, safety and welfare of their citizens. Instead, the SDWA preserves Longmont's ability to restrict the storage of fracking waste within its municipal borders.

b. No Conflict with State Law

Article XVI's fracking waste provisions do not conflict with state law. First, Plaintiffs admit that COGCC's regulation of underground injection wells is pursuant to a delegation of authority from the federal government in the SDWA. COGA SJ Brief at 21; COGCC SJ Brief at 17-18. Because the federal law preserves the City's local regulation authority, *see* Part IV.B.2.a, *supra*, the COGCC's derivative (federal) authority necessarily preserves the City's powers. In fact, the SDWA supersedes any State attempt to strip Longmont of its preserved authority. *See* U.S. Const. art. VI, cl. 2 ("This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.").

Second, no Colorado state statute presents any conflict with Article XVI. The only statute Plaintiffs cite to the contrary is the definitions section of the COGCA. COGCC SJ Brief

at 19-20.[11] COGCC argues that activities involving exploration and production waste, such as fracking waste, fall within the COGCA's definition of "oil and gas operations." *See* § 34-60-103(4.5), (6.5), C.R.S. (2013). An activity's characterization as an oil and gas operation does give the COGCC the authority to regulate it. § 34-60-106(2)(a), (d). However, as explained in Part IV.B.1.a, *supra*, this does not give the COGCC *sole* or *exclusive* authority to regulate in the area. *Bowen/Edwards* held as much when it held that the COGCA does not occupy the field of regulation of oil and gas operations. 830 P.2d at 1058.

Third, COGCC regulations raise no conflict with Article XVI. Per the federal SDWA, the COGCC rules require a state permit for injection wells. COGCC Rule 908(b). However, consistent with the SDWA, the rules provide,

> *Operators may be subject to local requirements for zoning and construction of facilities* and shall provide copies of any approval notices, permits, or other similar types of notifications for the facility from local governments or other agencies to the Director for review prior to issuance of the operating permit.

COGCC Rule 908(h) (emphasis added). COGCC offers no interpretation of this rule, but it plainly preserves local zoning and police power over injection wells, especially as that authority applies to home rule cities and as a result of the extensive powers granted by the Land Use Act.

With regard to preemption considerations, other COGCC rules Plaintiffs cite are ancillary to the Rule 908(h) savings clause. Rule 324A.d provides that "[n]o injection shall be authorized" to inject waste unless demonstrated that it will not pollute, and Rule 324A.e says "[n]o person shall accept water produced from oil and gas operations without first obtaining" a certificate

[11] COGCC also cites the Colorado Solid Waste Act, but only to show its irrelevance to this case. COGCC SJ Motion at 19 (explaining that fracking "exploration and production" waste is not the type of "solid waste" regulated under the act).

from the county. Rule 325(a) says "[n]o person shall commence operations" for an injection well without a COGCC permit. Rule 326 requires permitted injection wells to pass a mechanical integrity test. But these rules do not restrict local authority expressly nor with any implication of overriding the SDWA savings clause or Rule 908(b).

Rule 604.c(2)(B) describes areas where "[p]its are not allowed." COGCC Rule 604.c(2)(B)(ii). Plaintiffs fail to explain how this could conflict with Article XVI.

The COGCC rules do regulate open pits, but do not purport to override the concurrent local authority preserved in Rule 201. *See* COGCC Rules 901-08. Furthermore, the rules provide for disposal of produced water at "permitted commercial facilities," Rule 907.c.(2)(C), which suffices to serve operators' disposal needs without creating an operational conflict with Longmont's storage prohibition within the City. *See* Part IV.D, *infra*, on operational conflict; COGCC Rule 201. Rules 1001-04 involve reclamation, a subject Article XVI does not address.

Accordingly, Article XVI's fracking waste provisions do not conflict with federal law, state statute, or state regulations.

C. PLAINTIFFS HAVE NOT PROVEN THAT ARTICLE XVI IS BEYOND THE CITY'S HOME RULE AUTHORITY

Home rule propagated through the United States as a product of the Progressive Era. In response to the state of widespread corruption and neglect in municipal affairs, Progressives championed reforms to weaken the power of political machines. The state level of government became suspect as an agency outside the control of the voters of individual cities, and demand

grew for cities to have a greater voice in their own affairs.[12] Colorado voters passed the Home Rule Amendment to the constitution in 1902, by a vote of more than 2:1, 59,750 to 25,767,[13] approximately 49 years before the COGCA was passed in 1951.

It might not have surprised the voters of 1902 that the State government is now aligned with private industry in an attempt to overturn a local measure which Longmont considers necessary "[t]o protect property, property values, public health, safety and welfare, and the environment." Longmont Municipal Charter, § 16.1. But it may have satisfied those voters to know that Article XVI is protected by the Home Rule Amendment they passed. See *Havens v. Bd. of Cnty. Comm'rs of Cnty. of Archuleta*, 924 P.2d 517, 522 (Colo. 1996) ("In construing a constitutional amendment," such as the Home Rule Amendment, "we must take into account 'what the people believed the amendment to mean when they accepted it as their fundamental law.'").

The constitutional home rule provision "allows a municipality to legislate in areas of local concern that the state General Assembly traditionally legislated in, thereby limiting the authority of the state legislature with respect to local and municipal affairs in home-rule cities. Thus, home-rule cities have plenary authority over issues solely of local concern, and a home-rule city is not inferior to the General Assembly with respect to local and municipal matters that are within this authority." *Webb v. City of Black Hawk*, 2013 CO 9, ¶ 17 (citations omitted). If a

[12] Ernest S. Griffith, A History of American City Government: The Progressive Years and Their Aftermath 1900-1920, at 32 (1974); Frank Mann Stewart, A Half Century of Municipal Reform: The History of The National Municipal League 10 (1950).

[13] Colo. Dep't of State, Legislative Manual 234 (1903).

local law conflicts with a state statute over a matter of local concern, the local law supersedes the statute. *Id.* ¶ 16.

Among those matters of local concern is a city's land use authority: "home rule land use authority has a basis in the Colorado Constitution." *Voss*, 830 P.2d at 1064; *Colorado Min. Ass'n*, 199 P.3d at 723.

In contrast to matters of local concern are matters of state concern. In matters of state concern, a city may not legislate at all unless authorized by the state. *Webb v. City of Black Hawk*, 2013 CO 9, ¶ 18 ("*Webb*"). Some matters are characterized as being of "mixed" state and local concern, where "a home-rule regulation may coexist with a state regulation only as long as there is no conflict," but, "in the event of a conflict, the state statute supersedes the conflicting local regulation to the extent of the conflict." *Id.*

While case law will often describe the plenary local authority as being only over matters of "purely" or "solely" local concern, there is no purity test for a matter to be classified as local concern. Instead, "[t]o state that a matter is of local concern is to draw a legal conclusion based on all the facts and circumstances presented by a case. In fact, there may exist a relatively minor state interest in the matter at issue but we characterize the matter as local to express our conclusion that, in the context of our constitutional scheme, the local regulation must prevail." *Voss*, 830 P.2d at 1066 (quoting *City and County of Denver v. State of Colorado,* 788 P.2d 764, 767 (Colo.1990)). In other words,

> Practically, it is rare that regulatory matters fit neatly within one of these three categories. Regulations that are of local, mixed, or statewide concern often imperceptibly merge or overlap. Because the categories do not reflect factually perfect descriptions of the relevant interests of the state and local governments,

> categorizing a particular matter constitutes a legal conclusion involving considerations of both *fact and policy*.

Webb, 2013 CO 9, ¶ 19 (emphasis added) (citations omitted). Just because the state identifies a "'plausible interest' in regulating a matter to the exclusion of home-rule cities" does not mean "that it should be characterized as one of mixed concern." *City of Commerce City v. State*, 40 P.3d 1273, 1285 (Colo. 2002) ("*Commerce City*").

Therefore, whether a local regulation prevails over a state regulation depends on an analysis of facts. The courts "have rejected a categorical approach to the determination of that which is local and municipal and that which is general and state-wide, focusing instead on the *high degree of importance of the facts and circumstances of the particular case* to ascertaining the status of the matter at issue." *Commerce City*, 40 P.3d at 1282 (emphasis added) (citations and internal quotation marks removed). A court must make the determination of whether a matter is of local, state, or mixed concern "on an ad hoc basis." *Id.* at 1280. Where there is a dispute about those facts, summary judgment cannot be granted. *Moses v. Moses*, 505 P.2d 1302 (Colo. 1973).

The Supreme Court has "not developed a specific test for courts to resolve whether a matter is one of local, state, or mixed concern." *Commerce City*, 40 P.3d at 1280. It has developed a set of four factors to "assist the court in weighing the importance of the state interests with the importance of the local interests." *Id.* However, these four factors are not exclusive, and the court must weigh "any other factors [it] deem[s] relevant," with the ultimate goal being to "weigh the relative interests of the state and the municipality in regulating the

particular issue in the case." *Webb*, 2013 CO 9, ¶ 19; *accord* COGCC SJ Brief at 10 (calling the four factors "non-exclusive").

Longmont has already created a factual record of its weighty interests that support Article XVI, including local property values, health, safety, welfare, protection of the environment and overall quality of life in Part II, *supra*, and will supplement that evidence at trial. The City's specific interests in passing Article XVI are obviously relevant to the "weighing" this Court must conduct between the State's and the City's interest for each of the challenged provisions. *Id.* Plaintiffs, in their SJ Motions, give absolutely no consideration to the City's interests. However, only after a full evidentiary record has been developed can this Court pass judgment, in the ad hoc manner required and with an eye toward the "high degree of importance of the facts and circumstances of th[is] particular case." *Commerce City*, 40 P.3d at 1282.

As discussed below, there are many disputed issues of material fact that must be resolved before this Court can determine whether fracking is primarily a local concern, a mixed state and local concern, or a matter of state concern. These are matters which cannot be resolved via summary judgment. *KN Energy, Inc.*, 698 P.2d at 776.

The plaintiffs rely on *Voss*, a 1992 case involving a *total ban* on oil and gas drilling by the City of Greeley, a home rule city. Interestingly, after analyzing the four enumerated factors, the Supreme Court in *Voss* never identified whether the ordinance at issue was a matter of state, local, or mixed concern. Instead, the court simply held, "We conclude that the state's interest in efficient oil and gas development and production throughout the state, as manifested in the Oil and Gas Conservation Act, is sufficiently dominant to override a home-rule city's imposition of a total ban on the drilling of any oil, gas, or hydrocarbon wells within the city limits." *Voss*, 830

P.2d at 1068.[14] The court put great emphasis on the fact that this was a *total ban*, using that phraseology 23 times throughout the opinion.[15]

Clearly, *Voss* held *sub silencio* that even a *total drilling ban* was not a matter of local concern, but a matter of mixed concern that conflicted with the state's interest in oil and gas development. However, cities can regulate in the oil and gas realm, the court held, *without any explicit authorization from the General Assembly*, so long as the local regulations do not create an operational conflict. *Id.* at 1068-69. Operational conflict analysis, discussed below in Part IV.D, is therefore the hallmark of a "mixed" matter, and not, as the Commission would have it, a matter of only state concern. *E.g.*, *id.* at 1066; *see* COGCC SJ Motion at 8-9. Greeley's total drilling ban was preempted because it "substantially impeded the interest of the state in fostering the efficient development and production of oil and gas," which meant that an operational conflict existed based on the facts in that case. *Id.* at 1068.

Crucially for this and any preemption case, whether a matter is of state, local, or mixed concern is a fact-intensive determination that is meant to be flexible and change over time. *Commerce City*, 40 P.3d at 1283. ("The danger to be avoided is a temptation to consider something 'state' or 'local' because it was so denominated fifty years ago." (alterations omitted)). This is part of the "ad hoc" nature of the inquiry in each case. *See id.* at 1280. Changes to the characterization are meant to reflect "the importance of the facts and

[14] *Colorado Mining Ass'n v. Summit County* does not cast light on the home rule analysis, as it involved only a statutory county lacking home rule authority. 199 P.3d 718.

[15] The manager of COGCC's permitting department, as well as the deponents who operate wells under the COGCC's regime, admitted that Article XVI did not ban oil and gas drilling, only the completion processes that use hydraulic fracking. Section II.B.17, *supra.*

circumstances of the particular case to determine the status of the matter at issue, including the *time, technology, and economics*." *Webb*, 2013 CO 9, at ¶ 38 (emphasis added).[16]

The Commission has every right to argue that oil and gas regulation has changed from a matter of mixed concern (as determined in *Voss*) to a matter of state concern. However, it has failed to mention that the 1994 and 2007 amendments to the Act and subsequent rulemaking specifically preserve local authority, rather than override it.[17] Furthermore, the Commission has not put forward any facts which would indicate any change since 1992 in the time, technology, or economics that would show that the state's interests in oil and gas regulation are weightier than they once were, or that the City's are less weighty. Rather than point to facts, the Commission simply attempts to re-litigate the home rule legal analysis in *Voss*. *See* COGCC SJ Brief at 11-14. The one new circumstance since 1992 which the COGCC mentions, *id.* at 14, is the 2008 Rulemaking based on the 2007 Amendments which specifically preserve local authority.

The COGCC was correct in its oral representation that there has been a "sea change" in the science and technology of oil and gas production. However, this "sea change" has *decreased* the need for statewide uniformity of regulation, *decreased* the risk of extraterritorial impact by the City, and *increased* the risks to communities from extensive fracking in their jurisdictions.

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[16] While this Court should distinguish *Voss* rather than overrule it, it is notable that one of the two conditions for overturning precedent under stare decisis doctrine is whether the original decision should not be applied due to "changing conditions." *Friedland v. Travelers Indem. Co.*, 105 P.3d 639, 644 (Colo. 2005).

[17] The General Assembly, in passing the 2007 Amendments, specifically declared "that nothing in this act shall establish, alter, impair, or negate the authority of local governments to regulate land use related to oil and gas operations." 2007 Colo. Sess. Laws, ch. 20, sec. 1 (H.B. 07-1341). The 1994 amendments similarly declare "that nothing in this act shall be construed to affect the existing land use authority of local governmental entities." 1994 Colo. Legis. Serv. No. 314, § 1 (S.B. 94-177). The 2013 COGCC rulemaking Statement of Basis and Purpose, for example, contains a similar proviso. Ex. 43 at 2.

By proving these assertions with facts at trial, the City will prove that the matters in Article XVI are now primarily matters of local concern, despite the *Voss* holding that a *total local ban* was a matter of mixed concern. At the very least, the facts discussed below make it impossible for the plaintiffs to prove that no material fact is in dispute as to whether Article XVI presents matters of local concern.[18] Therefore Plaintiffs cannot prevail at summary judgment. *Bowen/Edwards*, 830 P.2d at 1030.

The Remainder of this Part IV.C addresses the four enumerated factors for weighing the state versus the local interest, and other factors critical to "weigh[ing] the relative interests of the state and the municipality in regulating the particular issue in the case." *Webb*, 2013 CO 9, ¶ 19. For each factor, the City points out material facts which will be further developed at trial to show that, in the totality of the circumstances, the City's interest in the matters in Article XVI outweighs the State's.

1. Plaintiffs Have Demonstrated No Interest in Uniformity of Fracking Regulation

"[U]niformity in and of itself is not a virtue." *Commerce City*, 40 P.3d at 1280. The State must prove the *need* for uniformity based on the specific facts of the case. *Id.* Calling fracking "technical" does not prove a need for uniformity. The Plaintiffs do not attempt such a proof, nor explain any need at all for uniformity here, so this factor is neutral.

[18] Strangely, COGA says the City "judicially admitted" in its *Longmont I* Consolidated Reply in Support of Its SJ Cross-Motion "that the regulation of oil and gas development is, at a minimum, a matter of mixed state and local concern." COGA SJ Brief at 2, 8. COGA bases this assertion on a single sentence of that brief, which described *Bowen/Edwards*' and *BDS*' holding based on *those cases'* facts, but did not accept those holdings as directly applicable to either *Longmont I* or *II*. *Id.* COGA must have missed the 14-page section in the City's Consolidated SJ Response Brief in *Longmont I*, explaining why the Ordinance at issue is a matter of local concern under the City's home rule authority. City's Consolidated SJ Response, at 33-47 (Dec. 10, 2013). Certainly the City stands by that position.

a. "Technical" Is Not the Test for Uniformity, and Plaintiffs Have Not Shown Article XVI to Be "Technical"

Rather than present facts on the need for uniformity in fracking regulation, Plaintiffs try to label Article XVI as "technical," tie the word "technical" to a tenuously related quote in *Bowen/Edwards* about operational conflict, and transport that quote into the home rule context – without ever explaining why the ability to frack must be uniform statewide. Plaintiffs' logic is gymnastic but not sound.

The most basic problem with labeling Article XVI "technical" is that the COGCC's own leadership disagrees. According to its chief engineer, the COGCC has no definition of technical. Ex. 3, pp. 144-45. When asked, "Do you have a definition in your mind of what technical means as it relates to oil and gas development?" Mr. Ellsworth responded that the term is not "definable," but that it was just a "broad defined adjective" as related to oil and gas, one that is "[d]efined by the individual using the term." *Id.* COGCC Director Matt Lepore agrees, saying, "Conflicts such as those with Longmont and [the COGCC] arise because the lines between 'land use' and the technical aspects of drilling that [the COGCC] regulates, are not always easy to discern."[19] The statements of COGCC's counsel therefore contradict the statements of the COGCC itself, and are merely litigation positions without basis in fact.

If "technical" is to have any meaning at all, it would apply to a regulation such as this: "The working pressure of any BOPE [blowout prevention equipment] shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole

[19] Allen Best, *Local Vs. State Authority*, Headwaters (Magazine of the Colorado Foundation for Water Education), Fall 2013, at 18.

with a pressure gradient of 0.22 psi/ft." Commission Rule 317(a). If a local regulation instead required the operator to assume a pressure gradient of 0.16 psi/ft, that might conflict with the state's ability to ensure safe production of oil and gas.

Such a situation is not present here. The COGCC has no regulations which prescribe specific "technical" conditions of fracking, such as who decides to frack a well, the composition and amount of fracking fluids, how many stages to frack, the procedures to follow when a well is fracked, and the like. *See* Part II.B., *infra*. Article XVI creates no technical confusion about how an operator should proceed when fracking wells in Longmont since the COGCC does not regulate the process.

Regardless, the "technical" label is not part of the home rule analysis. In *Bowen/Edwards* the court introduced the word "technical" to present hypothetical situations when a county regulatory scheme might conflict in operation with the state scheme: "For example, the operational effect of the county regulations *might be to impose technical conditions* on the drilling or pumping of wells under circumstances where no such conditions are imposed under the state statutory or regulatory scheme." *Bowen/Edwards*, 830 P.2d at 1060 (emphasis added). "*To the extent that such operational conflicts might exist,* the county regulations must yield to the state interest." *Id.* (emphasis added). The court's point was to illustrate that operational conflicts – as distinct from matters of purely statewide concern – exist when the local law "materially impede[s] or destroy[s] the state's interest." *Id. Voss* simply echoed *Bowen/Edwards*' description of how an operational conflict might arise. *Voss*, 830 P.2d at 1068.

b. Varying Regulations Belie the Professed Need for Uniformity

The State's own regulations belie its claimed interest in uniformity. In several places, the COGCC rules prescribe a different regulatory regime for oil and gas operations in different parts of the state. Rule 317A contains "Special Drilling Rules" for the "D-J Basin Fox Hills Protection Area." These alternative rules extend to specific surface casing requirements, aquifer protection, and exploratory wells. Rule 318A contains a separate, "special" set of rules for well location, spacing, and unit designation in the "Greater Wattenberg Area." Among other things, the groundwater monitoring rules in this area are weaker than elsewhere. *Compare* COGCC Rule 318A.e(4) *with* COGCC Rule 609. Rule 318B, another "special" rule for "Yuma/Phillips County" changes well location and spacing requirements for this area and relieves the operator from an otherwise required notice provision. COGCC Rule 318B.g.

Presumably, the State considers oil and operators to be sophisticated actors capable of following different rules in different places. In Colorado and elsewhere, other industries are expected to learn local regulations before beginning operations, and Plaintiffs describe no reason why this would be an especially large burden for oil and gas operators. Indeed, oil and gas operators in other states are commonly expected to respect local authority: California, Illinois, Texas, New York, Pennsylvania, and Oklahoma, for example, all allow local regulation of oil and gas operations.[20] It therefore appears that, as a factual matter, statewide uniformity of

[20] *See* Cal. Att'y Gen. Op. No. SO 76-32, 16 (1976), *available at* ftp://ftp.consrv.ca.gov/pub/oil/publications/prc03.pdf (opining that the State of California's approval of an oil or gas well "would . . . not nullify a valid prohibition of drilling or a permit requirement by a county or city in all or part of its territory"); *Tri-Power Resources, Inc. v. City of Carlyle*, 359 Ill. Dec. 781, 786 (Ill. App. Ct. 2012) (holding that a city had "the power to prohibit the operation of an oil or gas well within its municipal limits"); *Unger v. State*, 629 S.W.2d 811, 812 (Tex. App. 1982) (agreeing that, in Texas, a municipality "has full authority both to regulate and

regulation is not necessary to foster oil and gas production. Plaintiff TOP's leases, and its agreements with the City, for instance, require that TOP abide by all local regulations, not just by those imposed by the State. *See* TOP SJ Motion, Exhibit D, ¶ 23 of Master Contract, and ¶ 31 of Operator's Agreement. As described in Part IV.D, *infra*, *Bowen/Edwards* allows for local regulation in Colorado as well.

c. Plaintiffs Have Not Shown Article XVI to Be Wasteful

The *Voss* court's sole rationale under the uniformity factor of home rule preemption analysis for finding a total ban on oil and gas operations impermissible was that the ban would be wasteful and impact correlative rights in a "common source or pool." *Voss*, 830 P.2d at 1067. Plaintiffs invoke these *Voss* issues without applying the *Voss* facts to this case. TOP SJ Motion at 5; COGA SJ Brief at 13. The *Voss* court held:

> . . . it is often necessary to drill wells in a pattern dictated by the pressure characteristics of the pool, and because each well will only drain a portion of the pool, an irregular drilling pattern will result in less than optimal recovery and a corresponding waste of oil and gas. Moreover, an irregular drilling pattern can impact on the correlative rights of the owners of oil and gas interests in a common source or pool by exaggerating production in one area and depressing it in another. Because oil and gas production is closely tied to well location, Greeley's total ban on drilling within the city limits could result in uneven and potentially wasteful production of oil and gas from pools which underlie the city but extend beyond the city to land where production is not prohibited by a total drilling ban. Greeley's total ban, in that situation, would conflict with the Oil and Gas Conservation Commission's express authority to divide a pool of oil or gas into drilling units and to limit the production of the pool so as to prevent waste and to

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prohibit the drilling of oil wells within its city limits"); *Anschutz Exploration Corp. v. Town of Dryden*, Tompkins Cnty. Index No. 2011-0902 (N.Y. Sup. Ct. Feb. 21, 2012) (attached as Exhibit C) (approving a city ordinance banning all oil and gas exploration, production, and storage); *Huntley & Huntley, Inc. v. Borough Council of Borough of Oakmont*, 964 A.2d 855 (Pa. 2009) (approving a zoning ordinance excluding oil and gas wells from residential zoning districts); *Vinson v. Medley*, 1987 OK 41, 737 P.2d 932, 936 ("A city is empowered to enact zoning laws to regulate the drilling of oil-and-gas wells with a view to safeguarding public welfare.").

> protect the correlative rights of owners and producers in the common source or pool to a fair and equitable share of production profits.

830 P.2d at 1067 (footnote omitted). Analyzing that exact quotation, this Court has found that it is "full of facts." Order re: Motion to Compel, at 4 (Dec. 19, 2013) (attached as Exhibit 51).

Unlike conventional reservoirs, modern unconventional reservoirs like the ones underlying Longmont are composed of "tight sands," meaning they are less permeable than formations previously targeted. Ex. 4 at 13. Permeability is the "measure of how easy it is for fluids to move through the porous media, through the rock." *Id.* at 92.

In other words, oil and gas that operators are now seeking under Longmont does not move freely in pools, as the *Voss* reservoir was described. It is trapped in shale. Fracking is said to be intended to "create permeability" in an unconventional formation. Ex. 2 at 172-73. But, by definition, a wellbore in a low permeability reservoir is far less apt to affect pressures in nearby rock than a wellbore in a conventional play, as would likely have been at issue in *Voss* in 1992. An "irregular drilling pattern" will therefore *not* "result in less than optimal recovery" beneath Longmont, as it would in *Voss*. *See* Ex. 4 at 92. While well spacing may have been a critical COGCC function in *Voss*, the COGCC's own rules reflect that, for horizontal wells commonly used in unconventional formations, well spacing is now left to the operator's discretion:

> Where a drilling and spacing unit does not exist for a horizontal well, a horizontal wellbore spacing unit shall be designated by the operator for each proposed horizontal well. . . . This rule does not limit the number of formations that may be completed in any GWA drilling and spacing unit nor, subject to subsection c., above, does it limit the number of wells that may be located within the GWA windows.

COGCC Rule 318A.a(4)(D), 318A.f. As Mr. Holloway, affiant for COGA, agreed, the operator determines the size of the unit. Ex. 9 at 64.

Article XVI will not create waste. The COGCA's definition of waste is complex, but includes unreasonably reducing reservoir pressure, inefficient dissipation of energy, and reducing the amount of oil or gas ultimately recoverable. § 34-60-103(11)-(13). The only affidavit to allege waste is Mr. Holloway's, but at his deposition Mr. Holloway clarified that he only meant he thought Article XVI would reduce his profit. Ex. 7 to COGA SJ Motion ¶ 8 ("Holloway Aff."); Ex. 9 at 117.

As Mr. Holloway explained, for decades it has been a practice of some operators to drill a well targeting a single formation. Ex. 9 at 21. Later, an operator can use the same well to target other formations. *Id.* at 21-24. A first effort might only produce 3.5% of the oil and gas in a reservoir. *Id.* at 51. The rest of the reservoir is not wasted, but is "left for future production and development." *Id.* at 53. Even when an operator drills through a formation to reach a lower one, it can simply cement off the upper formation, saving it for production at a later date. *Id.* at 29.

In practice, it is the operator rather than the COGCC who chooses whether to frack a well, and sometimes the operator chooses not to. Ex. 3 at 67, 155. Obviously the COGCC does not consider it wasteful not to frack.

When it comes to the development of new production technologies, including ones that will allow production of resources previously thought non-producible, "[t]here's always that evolution of things occurring." Ex. 9 at 120-21. Part IV.D.2.b below describes how existing technologies already allow for economic development of oil and gas in Longmont, even under Article XVI. But regardless, unlike in *Voss*, Article XVI is not wasteful; at most, it merely preserves minerals for extraction at a later date with a different or new, less troubling technology.

In sum, numerous facts are material to the question of uniformity, and evidence before the Court disputes Plaintiffs' assertions that fracking regulation must be uniform. Even if Plaintiffs can raise facts supporting a state interest in uniformity, the state's need for uniformity is a factual matter to be resolved at trial, after full consideration of the geology and economics at issue in this case, and not at summary judgment. *Webb*, 2013 CO 9, ¶ 38.

2. Plaintiffs Have Not Shown Article XVI to Have Extraterritorial Effect

The COGCC claims an extraterritorial effect of Article XVI by asserting, without explanation, that underground "oil and gas pools" do not conform to jurisdictional boundaries any more than they did in 1992 in *Voss*. COGCC SJ Brief at 13. As with uniformity, this ignores the fact that oil and gas operators in Longmont and elsewhere in Colorado are not seeking oil from "pools" anymore, but from tight shales. Changes in the industry mean operators can now reach and develop minerals they could not twenty years ago, when *Voss* was decided. Ex. 9 at 119-21. Nowadays, the oil and gas that operators seek near Longmont does not lie in pools, isolated traps, or pockets, but is formed in shale rock that exists in long continuous layers (former sea beds), resolving the problem the *Voss* court recognized for the purposes of modern exploration in unconventional plays.

The shales are being developed by a method known as horizontal drilling, which can reach a target from as much as two miles away. *See, e.g.*, Exs. 40-41. The mineral owner now drills a directional or horizontal well to the desired shale rock, fractures the rock in any number of locations, and extracts the resource. COGCC's engineering manager pointed to new COGCC rules that "evolved in the late 1990's encouraging directional drilling in the [Greater Wattenberg

Area]", and the advent of horizontal drilling in about 2010 as "significant changes" in the development of shale-bound resources. Ex. 3, pp. 39-42.

As shown by evidence already developed, these innovations dramatically change the extraterritoriality analysis. The *Voss* court's finding that Greeley's total ban had an extraterritorial effect was "based primarily on the pooling nature of oil and gas." *Id.* The ban created a problem for owners of interests in pools which lay partly inside and partly outside the city. *Id.* at 1067-68. Because drilling was directly downward, the Greeley ordinance could force the owners of such pools to drill outside the city, on the edge of the pool. *Id.* This could "result in an increased production cost, with the result that the total drilling operation may be economically unfeasible," and could therefore impede the owner's ability "to obtain an equitable share of production profits." *Id.*

Like the section this Court quoted, *supra*, this section of *Voss* is also "full of facts." Ex. 51 at 4. Those facts do not apply to this case. With current technology, extraction has little to no effect on the pressure characteristics of nearby shale, and, Article XVI has no detrimental effect on any extraterritorial mineral owners. Ex. 9 at 121-24.

In his deposition, Edward Holloway, the CEO of Synergy Resources Corporation, described a set of wells drilled on Longmont's border after Article XVI took effect. Ex. 9, at Exs. 42, 41, and 40. The wellheads are just outside Longmont, angle down into subterranean Longmont, turn east, exit Longmont, and continue into the Town of Frederick. *Id*. Synergy and Mr. Holloway have agreed not to frack the portion of the well that is within Longmont's subsurface. Ex. 9, pp. 106-109. Yet the portions of the wells outside Longmont *will* be fracked. *Id.*, pp. 73-76. The fracking stages begin immediately east of Longmont and continue further to

the east, just as they would without Article XVI in place. *Id.* While Mr. Holloway believes it would have been profitable to frack within Longmont as well, the situation illustrates the way in which current oil and gas technology allows for a sharp distinction between extraction methods in different jurisdictions, and that Article XVI has had no extraterritorial affect outside the City in a place like neighboring Frederick.

In other words, fracking outside of Longmont can continue much as it did before, without measurable effect on the resources left in the ground in Longmont. At the very least, material facts are in dispute as to whether Article XVI has extraterritorial effect.

3. The City Is the Only Authority that Has Regulated Fracking in Longmont

As explained above in Part IV.B.1.c, the COGCC has virtually no restrictions on the practice of fracking. The first substantive regulation of fracking in Longmont was Article XVI. While COGCC has a tradition of regulating oil and gas operations generally, and the City has a tradition of regulating land use impacts of industrial activities, at the intersection of these two traditions – regulating fracking for its land use impacts – the City is the only entity regulating the specific subject matter of Article XVI. The City's two years is admittedly not a long "tradition" of substantively regulating fracking operations, but it is longer than the Commission's. *See Voss,* 830 P.2d at 1067.

4. The Constitution Is Neutral or Favors Local Concern

The Colorado Constitution is silent as to whether oil and gas or fracking operations are matters of state or local concern. *Accord* COGCC SJ Brief at 14. As the Citizen-Intervenors explain in their SJ Response, however, the Bill of Rights weighs in favor of community and

individual rights against risks to health, safety, and wellness. Accordingly, if the constitution factors into the balance, it favors home rule control.

5. Article XVI Is Insignificant to the State's Economic Interests

Longmont's impact on the statewide economics of oil and gas is barely measurable. The City represents 27.6 square miles out of the total of 104,000 square miles in the State, or about 0.027 % of the state's landmass; and of the 52,049 producing wells in Colorado, only 10-12 are in Longmont. Ex. B to Citizen Intervenors' SJ Response ¶ 8. The City is aware of no evidence that employees of the oil and gas industry live in Longmont. Because the State distributes a portion of severance taxes from oil and gas operations to cities based on oil and gas employment in each city, Longmont's expected share is expected to be only 0.06% of its total budget for 2014. *Id.* ¶ 11.

Analysis of the home rule factors depends on "the facts and circumstances of the particular case." *Commerce City*, 40 P.3d at 1282. This case is specific to Longmont. The City need not show that its fracking restriction would be a matter of local concern at another time or in another place, under different circumstances of technology or economics. *Webb*, 2013 CO 9, at ¶ 38. This Court's task is narrowly focused on Longmont's Article XVI, and the only facts relevant to this case, including economic facts, are the ones relating to Longmont itself and its relationship to the State.

6. Article XVI Protects Longmont's Paramount Interest in its Community's Health

Research is ongoing to more precisely determine the health impacts of fracking, but early evidence shows that it contributes to a panoply of significant health risks for residents of the surrounding community. It appears to cause birth defects such as congenital heart defects and

neural tube defects, to a distance of 10 miles from the mother's home. Part II, *supra*, ¶ 26. It disrupts the endocrine systems of humans and animals. *Id.* ¶ 27. Fracking chemicals damage human skin, eyes, respiratory system, gastrointestinal system, and brain. Exhibit A to Citizen Intervenors' Consolidated Response to Summary Judgment Motions ¶ 21 (Affidavit of Carol Kwiatkowski). They cause headache, dizziness, confusion, memory loss, tingling in the extremities, peripheral neuropathy, all similar to complaints from residents and workers in the gas fields. *Id.* They can also damage the liver and the metabolic system, the endocrine system, affecting reproductive health and development in the womb. They affect the immune system, respiratory system, and the heart. *Id.* Residents living less than half mile from wells are at greater risk of experiencing health effects than those living further away. *Id.* ¶¶ 31, 33. Immediate effects include headaches, nausea, upper respiratory irritation, airway and mucous membrane irritation, and nosebleeds. *Id.* ¶ 32. Longer term effects can include cancer, birth defects, and exacerbation of chronic diseases like asthma, chronic obstructive pulmonary disease (COPD), and cardiac disease. *Id.*

Many of these are health problems that are not expressed until much later in life, long after exposure took place. *Id.* ¶ 21.

Polycyclic aromatic hydrocarbons are an air pollutant associated with fracking, and, when exposed to pregnant mothers, appear to cause preterm births, low birth weight babies, smaller skull circumferences, impeded cognitive development, attention and behavioral problems, and childhood obesity. *Id.* ¶¶ 23-25.

Plaintiffs would force these health risks on the people of Longmont. But, before they can do so, they must prove that some interest of the State somehow outweighs the value of human

health. While the State might see its interest only in dollars, the local interest is in the well-being of the residents of the City. Longmont has no interest in prohibiting fracking in the vast rural areas of the state; but close to home, in settled neighborhoods, the local interest in human health is paramount, easily outweighing the economic value or unexplained "uniformity" value to the State of fracking within Longmont.

7. Article XVI Prevents Other Local Impacts of Fracking

Oil and gas wells cause extensive air pollution, surface and groundwater pollution, noise, dust, and light pollution to a surrounding community. Exs. 10-15, 19, 21-23, 32, 38. Even in rural areas, air pollution near wells is higher than the federal hazard standard – five times higher. Part II.C, D, E *supra*. The worst air pollution comes from the completion stage of a well, when fracking occurs. *Id.* Groundwater is already being polluted in Longmont, and such pollution stands to increase if Article XVI is overturned. Part II.D ¶¶ 28-30; Ex. 15. So far this year, 156 oil and gas spills have been reported across the state. *Id.* ¶ 34. Longmont's location at the confluence of the Saint Vrain and Left Hand Creeks makes it particularly susceptible to flooding risks as seen last September. Those floods compromised holding tanks and released huge amounts of oil and fracking waste. *Id.* ¶ 40. More Longmont fracking sites would only increase the risk of dangerous spills.

Alarmingly, Ohio and Oklahoma have found that fracking causes *earthquakes*. *Id.* ¶ 37. The industry believes these earthquakes should be "small," but the COGCC has no plans to research the issue in Colorado. Ex. 2 at 141-42; Ex. 3 at 144; Ex. 33.

The thousands of truck trips necessary to carry water to a frack job dramatically increase traffic in the area, and triple or quadruple the fatality rate nearby. Part II, *supra,* ¶ 38.

Fracking booms turn communities into boomtowns, and set them on a boom-and-bust cycle. While the boom lasts, a boomtown often faces rising crime, housing shortages, price inflation, overextended public services, and less obvious effects such as substance abuse and mental illness. *See generally* Ex. 38.

These impacts are multifarious. Grasping their extent takes a full hearing of the evidence, which cannot occur until trial. Until then, Plaintiffs have not shown any state interest to outweigh the local interest in preventing these risks and impacts to the people of the City. By failing to discuss these impacts in their briefs, Plaintiffs illustrate that they do not consider these matters to be of state rather than local interest. The COGCC demonstrates its lack of interest by failing even to heed concerns about earthquakes expressed by *other state agencies*. *Id.*; Ex. 3 at 144.[21] The State has ignored whatever interest it might have had in these matters. Furthermore, these matters of localized impacts are inherently matters of localized concern. They are less meaningful in the vast rural areas of the state, which the COGCC has more of a history regulating, and far more meaningful to the densely clustered population of a city like Longmont. The interest in preventing these impacts is therefore both local and substantial.

8. Property Values

Unsurprisingly, concerns about the human health and nuisance impacts of the current fracking boom have also disturbed the market for property, decreasing the value of homes near fracking sites by a factor of 5-15%. Part II, ¶¶ 25, 33, *supra*. Potential buyers reduce their bids

[21] Just last month, the Ohio Department of Natural Resources swiftly changed its fracking rules based on "recent seismic events . . . that show a probable connection to hydraulic fracturing near a previously unknown microfault." *Ohio Announces Tougher Permit Conditions for Drilling Activities Near Faults and Areas of Seismic Activity*, ODNR Division of Oil & Gas Resources, http://oilandgas.ohiodnr.gov/oil-gas-home/post/ohio-announces-tougher-permit-conditions-for-drilling-activities-near-faults-and-areas-of-seismic-activity (Apr. 11, 2014).

when they learn that a home is near an existing or proposed fracking site, or walk away from the transaction altogether. *Id.*; Exs. C-D to Citizen Intervenors' SJ Response (Affidavits of Nanner Fisher and Ron Throupe).

Clearly, a city has a strong interest in maintaining property values and drawing new residents. Fracking threatens this interest by bringing a sharp increase in oil and gas wells to the area.

9. Public Safety Costs

Well sites carry risks of fire and explosion. Part II, *supra*, ¶ 36; Ex. 32 ¶¶ 5-6. The City of Greeley, for example, is seeing a spike in dangerous incidents. *Id.* In one reported incident, elementary schoolchildren had to shelter inside their school while local firefighters battled a blaze at a nearby well. Ex. 32A at 2.

The COGCC has made it clear that relies on local governments to extinguish these fires and explosions. Part II, *supra*, ¶¶ 36, 39; Ex. 3 at 129. So, in addition to the risks to human safety itself, the City must find some way to pay for the costs of providing public safety when oil and gas wells enter the community. Greeley, for example, is spending $5.3 million on a training facility expansion to improve its response to incidents at oil and gas wells. Ex. 32A at 2.

Longmont's top fire official, Deputy Public Safety Chief Jerrod Vanlandingham, explains that while there are few oil and gas wells active in Longmont at this time, the risk increases as the number of wells increases. Ex. 32, ¶ 6. He continues:

> Fires at oil and gas facilities are distinct from other types of fires, and require different training and additional resources. The City would need to procure additional equipment to suppress such fires, such as apparatus and a foam suppressant, and would need to devote firefighter time to receive additional training.

> The City's fire suppression training facility would require modifications and upgrades to accommodate such training.

Id. ¶ 7.

While Plaintiffs may assume that operators' severance taxes will pay for these operations, they do not. *Id.* ¶ 8. Instead, the City would need to raise additional funds to deal with these costs. *See id.*

The City has a strong interest both in protecting the safety of its residents, as well as in maintaining a feasible cost structure for providing public safety services. These interests add to the composition of City interests which outweigh the state interest in this case.

10. Plaintiffs Explain No Need for Extensive State-Local Cooperation in Implementing Article XVI

The COGCC argues, "[t]he need for 'cooperation among governmental units' is an indicator that a particular matter is of statewide concern," and that the SDWA involves state-federal interaction in injection well regulation. COGCC SJ Brief at 19-20. The COGCC cites a case for support, but omits what that case actually says: "We have found the need for cooperation *between cities and the state* an important factor in our analysis." *City of Commerce City v. State*, 40 P.3d 1273, 1281 (Colo. 2002) (emphasis added). The case involved a city system for ticketing traffic offenders by means of an automated state database. *Id.* A "certain level of cooperation between a city and the state" was "necessary to make the system work." *Id.* The state's need for local coordination, in other words, augmented the state's interest.

The COGCC's argument is therefore not supported by case law. Plaintiffs do not attempt to explain how Article XVI cannot function without function without significant state-local coordination. Instead the COGCC, without explanation, equates the state-local scenario to the

existing scenario, where the agency operates under delegated federal authority. COGCC SJ Brief at 19. The COGCC's argument fails to demonstrate how state interests dominate over local interests in the present case.

11. Fracking Waste

When an operator forces liquids into the wellbore under pressure, and then relieves the pressure, a portion of the fracking fluid returns to the surface. This liquid is called "flowback" or "produced wastewater." It contains the same chemicals that the operator injected into the well, including the chemicals shown to cause endocrine disruption and the other health effects discussed in Parts II.D-E, *supra*.

To prohibit the storage or disposal of these fluids in such vessels as open pits is a quintessential land use matter. *See Bowen/Edwards*, 830 P.2d at 1058; *Voss*, 830 P.2d at 1064, 1068; *Colorado Min. Ass'n*, 199 P.3d 718, 723 (Colo. 2009) ("[H]ome rule land use authority has a basis in the Colorado Constitution . . . ."). It is no less a home rule land use issue than if the City were to prohibit the storage of nuclear, toxic, or human waste in open pits. The impacts on City aesthetics and property values are obvious. The risks to human health of having these chemicals among neighborhoods, including risks of spills from accidents and flooding, are no less significant to the City's interests than they are for fracking itself.

12. Relative Analysis of Risk Favors Local Regulation in This Case

A debate is ongoing among legal scholars about the degree of caution with which governments should approach the permitting of new technologies and substances that pose risks to human health and the environment. Some argue for a strict cost-benefit analysis based on existing scientific research without any incorporation of risk-aversion. *See, e.g.*, Cass R.

Sunstein, *Beyond the Precautionary Principle*, 151 U. Pa. L. Rev. 1003 (2003). Others argue that those who would introduce serious threats to human health and the environment should face precautionary regulation until they demonstrate that the risk level is acceptable. *See, e.g.*, Noah M. Sachs, *Rescuing the Strong Precautionary Principle from Its Critics*, 2011 U. Ill. L. Rev. 1285.

Operating with a growing but incomplete body of scientific research on the risks of fracking, described in Part II and above in Part IV.C, the City and the State are clearly not regulating fracking with the same degrees of caution. In part, this is due to the riskiness of fracking to their respective interests. To the State, oil spills, explosions, fires, traffic deaths, frenetic property value fluctuations, and human injuries and illnesses from environmental causes may be an acceptable fact of life – an operating expense, a statistic. Over the broad expanse of Colorado, they become averages that rise and fall over time along generally smooth curves. To a City like Longmont, however, a single oil spill or explosion can be devastating. A property value decline can stunt the local economy, a cluster of birth defects can deter people from moving to town, and chronic asthma can force people to move away. *See, e.g.*, Ex. 11 ¶ 5.

The risks of fracking are uneven. They fall disproportionately on a locality like Longmont, and much less on the State as a whole. Risk-aversion on the City's part is therefore both rational and strongly in its interest. Inasmuch as Plaintiffs have demonstrated no countervailing interest of the State in seeking or avoiding the risks of fracking, the City's interest outweighs the State's.

13. Conclusion on Relative Weight of Home Rule Factors

The State has little to no interest in maintaining statewide uniformity of regulation over whether fracking is permissible, has not shown any extraterritorial impacts of Article XVI, has not traditionally regulated fracking, can point to no constitutional authority over fracking, and has a miniscule economic interest in overturning Article XVI. On the other hand, the City has presented facts demonstrating that Article XVI protects the human health, safety, and economic and social welfare of its community from the risks and certain impacts of fracking. Based on the evidence before the Court, the local interest outweighs the state interest by a wide margin, and therefore Article XVI is a matter of local concern over which the City has plenary authority. Home rule analysis is centered on the facts and circumstances of each case. At the very least, the City has raised a significant (although certainly not fully developed) record of facts raising a material dispute over the City's home rule authority to enact Article XVI, making summary judgment unwarranted.

D. PLAINTIFFS HAVE NOT PROVEN THAT ARTICLE XVI IS IN OPERATIONAL CONFLICT WITH STATE LAW

Even if the plaintiffs prove that Article XVI is not purely a matter of local concern, that is not enough to invalidate it. In order to prove that state law preempts Article XVI, the plaintiffs must also prove that there is an *operational conflict*, which exists "where the effectuation of a local interest would materially impede or destroy the state interest." *Bowen/Edwards*, 830 P.2d at 1059. When an operational conflict exists, the local regulation "must yield to the state interest." *Id.* at 1060. Operational conflict is therefore a substantive standard.

It is also a procedural standard. Operational conflict "must be resolved on an ad-hoc basis under a fully developed evidentiary record." *Id.* (emphasis added). Without such an evidentiary record and "findings of fact" based on the record, a trial court-level finding of preemption will not be sustained by an appeals court. *See id.*

To prove preemption, the plaintiffs must therefore prove that Article XVI materially impedes or destroys the state interest, *and* that it does so not in some abstract sense but "in operation," based on specific facts in the record.

For the following reasons, there is no operational conflict in this case.

1. There Has Been No Evidentiary Hearing

Operational conflict cannot be found without first having an evidentiary hearing. After finding that the COGCA does not expressly or impliedly preempt local oil and gas regulation, the Supreme Court "hasten[ed] to add that there may be instances where the county's regulatory scheme *conflicts in operation* with the state statutory or regulatory scheme." *Bowen/Edwards*, 830 P.2d at 1060 (emphasis added). "Any determination that there exists an operational conflict between the county regulations and the state statute or regulatory scheme, however, *must be resolved on an ad-hoc basis under a fully developed evidentiary record*." *Id.* (emphasis added). Because the trial court had not developed a full evidentiary record, the Supreme Court remanded for further factual development. *Id.*

The City has not had an opportunity to fully develop a factual record in this case. As explained in the City's Motion for Continuance and Reply, the parties were focused on the *Longmont I* case, *Colorado Oil and Gas Conservation Commission v. City of Longmont*, 2012CV702 (Boulder County Dist. Ct.), until recently. *See* Reply in Support of Motion for

Continuance, at 20-21 (Apr. 28, 2014). Since the Court granted the Motion for Continuance on April 29, giving the City less time than requested, the City has been compiling evidence as quickly as possible, while also writing this brief and deposing Plaintiffs' affiants. The City has diligently put the best factual record before the Court that it could in such a timeframe, but it is far from the "fully developed evidentiary record" *Bowen/Edwards* requires for final adjudication of an operational conflict. 830 P.2d at 1060.

This Court has set an evidentiary hearing for ten days in April 2015. Amended Notice of Hearing (May 7, 2014). *That* is the Court's opportunity to hear the full range of evidence in this case and come to an informed decision on whether there is an operational conflict. Until then, the record is incomplete, lacking the full set of facts showing how Article XVI does not materially destroy the state's interest. *See also Bd. of Cnty. Comm'rs of Gunnison Cnty. v. BDS Int'l, LLC.*, 159 P.3d 773, 779 (Colo. App. 2006) ("[A]n evidentiary hearing is necessary to determine the extent of any operational conflicts in this case.").

Accordingly, this Court cannot render judgment for the Plaintiffs at this time.

2. Plaintiffs Have Not Shown Article XVI to Materially Impede or Destroy the State Interest

Substantively, Plaintiffs have not proven operational conflict because facts support the City's arguments below, that (a) Article XVI *supports* rather than impedes the state interest; and (b) Article XVI does not prevent oil and gas production in Longmont.

a. The State Interest Now Includes Public Health, Safety, and Welfare

Operational conflict exists only where a local law "would materially impede or destroy the state interest." *Bowen/Edwards*, 830 P.2d at 1059. Because Article XVI *supports* the state interest as defined by the General Assembly, it creates no operational conflict.

The General Assembly has defined the state's interest in oil and gas regulation with its purpose statement for the Colorado Oil and Gas Conservation Act. *See id.* at 1059-60 (citing § 34-60-102(1) as the statement of the state's interest). The Act states, "It is declared to be in the public interest to:"

> (I) Foster the responsible, balanced development, production, and utilization of the natural resources of oil and gas in the state of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources;
>
> (II) Protect the public and private interests against waste in the production and utilization of oil and gas;
>
> (III) Safeguard, protect, and enforce the coequal and correlative rights of owners and producers in a common source or pool of oil and gas to the end that each such owner and producer in a common pool or source of supply of oil and gas may obtain a just and equitable share of production therefrom; and
>
> (IV) Plan and manage oil and gas operations in a manner that balances development with wildlife conservation in recognition of the state's obligation to protect wildlife resources and the hunting, fishing, and recreation traditions they support, which are an important part of Colorado's economy and culture. . . .

§ 34-60-102(1)(a), C.R.S. (2013).

It is significant that the state's interest is not merely to foster production, avoid waste, and protect correlative rights. A new addition to the purpose statement since *Bowen/Edwards* is "protection of public health, safety, and welfare, including protection of the environment and wildlife resources." *Id.* § 34-60-102(1)(a)(I); 2007 Colo. Sess. Laws, ch. 20, sec. 1 (H.B. 07-1341); 1994 Colo. Legis. Serv. No. 314, § 1 (S.B. 94-177). Where local regulations "attempt to

promote" the "protection of public health, safety and welfare", they are *supporting* rather than conflicting with the state interest and therefore are "not, on their face, contrary to state law, and a hearing is required to determine any operational conflicts." *BDS*, 159 P.3d at 781 (drainage and erosion regulations not preempted, because they "attempt to promote the state's interest in protecting the land and topsoil").

For the reasons described in Part IV.C, *supra*, Article XVI works to protect health, safety, and welfare in Longmont. Because it supports this state interest, there is no operational conflict – or at least facts are in dispute as to whether there is an operational conflict. Accordingly, Plaintiffs cannot prevail on their preemption claim.

b. Operators Can Drill and Produce Wells Without Fracking

Much of Plaintiffs' argument hinges on their factual allegation that Article XVI is a de facto ban on all oil and gas drilling. TOP SJ Motion at 14; COGCC SJ Brief at 6; COGA SJ Brief at 4. This has been the primary tactic the Plaintiffs have used to connect this case to *Voss*, which overturned a total ban on all forms of oil and gas drilling. However, even if a matter is not of purely local concern, a city may enact land use regulations shy of a total ban, so long as the regulations do not create an operational conflict with state law, i.e. so long as they "do not frustrate" the state's interest. *Id.* at 1068-69.

Plaintiffs attempt to use their affidavits to support their allegation of a de facto ban. In depositions of the affiants, Defendants uncovered enough contrary facts to put the affidavit testimony into dispute. As the affiants admit, the COGCC's own documents show that wells, including wells near Longmont and targeting the geologic formations under Longmont, can be drilled, have been drilled recently, and are currently producing oil and gas – all without fracking.

The affiants have also shown themselves to be unaware of the use of underbalanced drilling (UBD), a drilling process, as an alternative to fracking which has in fact been shown to be much more efficient and economical than fracking itself.

These facts raise a material, factual dispute as to whether Article XVI frustrates the state interest in oil and gas production. If operators can and produce without fracking, as evidence shows, the state interest is preserved and Article XVI is dissimilar from the *Voss* total ban.

i. Depositions of Plaintiffs' Affiants, and Exhibits Thereof, Demonstrate a Factual Dispute as to Whether Fracking Is Necessary in Longmont

On their face, some of Plaintiffs' affidavits seem to indicate that a well cannot be economically drilled without fracking. Ex. 3 to COGCC SJ Motion ¶¶ 5-6 ("Seidle Aff."); Ex. 2 to COGCC SJ Motion ¶ 4 ("Ellsworth Aff."); Ex. B to TOP SJ Motion ¶ 5 ("Herring Aff."). However, the depositions of these affiants shed light on their conclusions.

Mr. Herring's knowledge of the economics of drilling wells without fracking them turns out to be quite limited. He has never attempted to drill a well without fracking it. Ex. 2 at 72-73. He is unaware of whether any wells have been drilled without fracking, "economic" or not, in the Wattenberg Field. *Id.* at 73-74. Mr. Herring knows that "[t]here are wells that are completed without hydraulic fracturing." *Id.* at 32. But Mr. Herring has never done any research to determine whether any wells have been drilled in the Wattenberg Field without being fracked. *Id.* at 44-45.

As for whether any particular well drilled by anyone other than TOP is "economic," Mr. Herring is basing his impression solely on the amount of oil and gas produced, without reference to other basic variables which affect the profit or loss of a well, such as the expense of the well

and the price the product will fetch. *Id.* at 74-77. And even then, the number of wells for which Mr. Herring has conducted even this most rudimentary investigation is only "40, 50, maybe 100," out of thousands of wells in the Wattenberg Field. *Id.* at 76. Mr. Herring has no documentary analysis or evidence of any kind supporting his statement that TOP "cannot economically drill" without fracking. *Id.* at 97-99. Instead, it's just his "personal opinion." *Id.* at 98. So, Mr. Herring's claim that TOP "cannot economically drill" without fracking is completely unfounded, and this Court should not give it credence. Herring Aff. ¶ 5 (Ex. B to TOP SJ Motion).

Mr. Ellsworth, the COGCC's affiant and lead engineer, has never drilled or fracked a well himself or through an operator he worked for. Ex. 3 at 109-10. He does not "evaluate wells for economics." *Id.* at 87-88. His interpretation is that if an operator is producing a well, they are getting economic value from it. *Id.* at 88. And he admits that some wells producing in the Greater Wattenberg Area, where Longmont is situated, have not been fracked. *Id.* at 67. Similarly, some wells have not been fracked which target the same formations as underlie Longmont. *Id.* at 73-83. By Mr. Ellsworth's own logic, then, it appears that it can be economic to drill and produce a well without fracking it.

Mr. Ellsworth's only statement in his affidavit regarding the alleged necessity of fracking a well is a quoted sentence from a recent COGCC Statement of Basis and Purpose. Ellsworth Aff. ¶ 4 ("'Most of the hydrocarbon bearing formations in Colorado would not produce economic quantities of hydrocarbons without hydraulic fracturing.'"). At his deposition, Mr. Ellsworth could not substantiate this statement. Ex. 3 at 86-88. Asked who authored the statement and decided it was true, his "best estimate" was Dave Neslin, the Director of the

COGCC at the time. Ex. 3 at 37-38, 87. Mr. Neslin is not an engineer like Mr. Ellsworth, but a lawyer. *Id.* It is highly questionable, therefore, whether the quoted statement is even an expert opinion, let alone whether it has useful factual value.

Mr. Seidle, a consulting reservoir engineer for the Plaintiffs, opined in his affidavit that, in his experience, "hydraulic fracturing is currently the only completion technology utilized in the Wattenberg Field." Seidle Aff. ¶ 5. Confronted with exhibits, however, he admitted that several wells in the Wattenberg area targeting formations which are also below Longmont have been drilled – and not fracked – as recently as 2012, and are currently producing oil and gas. Ex. 4 at 68-73. Mr. Seidle is not a geologist, nor is he involved in the production or completion (including fracking) aspects of oil and gas operations. *Id.* at 5-6, 75. He is concerned with properties of oil and gas reservoirs as they lie in the ground, but not with attempts to remove that oil and gas by fracking or otherwise. *Id.* at 5-7. He has done no analysis to determine the geology underlying Longmont including what formations are there, and has no experience with oil and gas reservoir engineering in Longmont. *Id.* at 75. He can't recall ever doing any specific analysis even in the general vicinity of Longmont. *Id.* at 76.

COGA affiant and Synergy Resources Corporation co-CEO Edward Holloway has a background in finance, and he has no educational degrees in engineering, geology, or petrophysics. Ex. 9 at 7-8. Alone among the affiants, Mr. Holloway's affidavit does not allege that Article XVI is a de facto ban on drilling or that his company cannot economically drill beneath Longmont. *See generally* Holloway Aff. (Ex. 7 to COGA SJ Motion). He did swear in September 2013 that Article XVI had "caused Synergy to forego drilling . . . two proposed wells that would cross Longmont's borders." Holloway Aff. ¶ 9. However, since that time – after

Article XVI had long been in effect – Synergy ***has drilled these two wells under Longmont***. Ex. 9 at 122-23. *Contra* COGA SJ Brief at 6. The wells are partly under Longmont and partly not. *Id.* at 82. After analyzing the situation more fully, Synergy decided to frack only the portions of the wells that are outside Longmont. *Id.* at 84.

Synergy has also drilled the wells just outside Longmont's border which, in September 2013, Mr. Holloway said it might not drill due to Article XVI. *Id.* at 84, 123-24; Holloway Aff. ¶¶ 10-11.

In sum, Plaintiffs' affiants' claims that operators cannot drill in Longmont without fracking do not withstand strict scrutiny. In fact, one operator – Synergy – has drilled in Longmont since Article XVI took effect. Ex. 9 at 121-24. The affiants were apparently unaware of the several examples of wells recently being drilled in the area without fracking, as described in COGCC documents. *E.g.*, Exs. 45-47; *see also* Denomy Aff. ¶ 9 ("There is little evidence that suggests that a lack of fracturing would prevent prolific production from a drilled well.") (Ex. B to Citizen-Intervenors' SJ Response). Those documents constitute evidence that, at the very least, it is a disputed fact whether fracking is necessary to produce a well in Longmont. The dispute is material because it is central to Plaintiffs' attempt to link this case to *Voss* as a de facto ban, and because it goes to the heart of whether Article XVI impedes or destroys the state interest in oil and gas production. *Bowen/Edwards*, 830 P.2d at 1060; *Voss*, 830 P.2d at 1068. Accordingly, summary judgment for the Plaintiffs is unwarranted.

ii. Underbalanced Drilling is a Viable Alternative to Fracking

Attached to this Response is the affidavit of Jim Hughes, a geologist with 34 years of experience in drilling, completing, and producing oil and gas wells. Ex. 44 ¶ 1 (Hughes Aff.),

and Ex. 1 thereto. He has co-authored two books and an article on a process called underbalanced drilling (UBD). Ex. 44 at Ex. 1 at 4.

Mr. Hughes explains that when an operator drills a well, they will often use drilling mud to create a "hydrostatic" pressure that prevents the resource from escaping the well during drilling. Ex. 44 ¶ 4. The drilling mud damages the wellbore, and disconnects the wellbore from the target reservoir. *Id.* ¶ 5. Often, the well is then fracked, with the intent of reconnecting the wellbore to the reservoir by forcing cracks open between the wellbore and the reservoir. *Id.*

Underbalanced drilling reverses this inefficient dynamic. *Id.* ¶ 8. Rather than use drilling mud to force hydrocarbons to stay in the well during drilling, UBD allows the underground pressure of oil and gas to bring it naturally to the surface. *Id.* Because it does not damage the wellbore's connectivity to the reservoir with drilling mud in the first place, it is not necessary to partially repair the damage by fracking the well. *Id.* ¶¶ 8, 13-14. Thus. "UBD is a viable alternative to hydraulic fracturing." *Id.* ¶ 13.

UBD is actually more efficient than fracking. In unconventional reservoirs like Longmont's, UBD produces more hydrocarbons than fracking (up to eight times more). *Id.* ¶¶ 9-10. Taking costs into account, Mr. Hughes "do[es] not agree that hydraulic fracturing is the only completion technology which would result in a producing or economic well." *Id.* ¶ 12. Indeed, it is not even "the most effective or economical completion technology." *Id.* ¶ 9.

Some of the largest oil services companies in the world are beginning to use UBD, with excellent results. Weathorford, for example, has reported a fourfold increase in productivity by using UBD rather than fracking. *Id.* ¶ 11. Mr. Hughes states that UBD's viability extends to the Watternberg Field and within Longmont. *Id.* ¶ 13.

Messrs. Herring and Holloway, oil and gas executives, have heard of UBD, but have never done it in the Wattenberg Field or elsewhere. Ex. 2 at 54-55; Ex. 3 at 16. Mr. Seidle, the reservoir engineer, has also heard of it, but couldn't describe it in detail, explaining he is "not a driller." Ex. 4 at 83. Mr. Ellsworth, COGCC's lead engineer, was familiar with it, but was not aware that it could be an alternative to fracking. Ex. 3 at 68. He stated that the COGCC is has not conducted any research on the process. *Id.* at 105.

As a whole, Plaintiffs' affiants were unaware of the possibility that UBD can replace fracking, and even surpass it as a more efficient process. Mr. Hughes, in contrast, has a great amount of personal experience with wells that use UBD and produce excellent results. Ex. 44 ¶¶ 8, 10. This experience makes his testimony credible when he states that "UBD is a viable alternative to hydraulic fracturing." *Id.* ¶ 13; *see also* Denomy Aff. ¶ 10 ("Scientists, researchers and oil and gas companies have been honing in on alternatives to the process of hydraulic fracturing across the world.").

If the Plaintiffs dispute these facts, they will be raising a material issue of disputed fact, precluding summary judgment. Plaintiffs have acknowledged on several occasions that this is a highly material issue, most recently by submitting the affidavits in their SJ Motions and calling Article XVI a de facto ban. Citing the Seidle Affidavit, the COGCC went so far as to argue that "there are no alternatives" to fracking. COGCC SJ Brief at 6. Earlier, in the *Longmont I* case, Plaintiffs argued and this Court agreed that the question of whether Article XVI was a de facto

ban was a threshold issue in the *Longmont I* case and would necessarily be decided in the instant case.[22] As the Court found:

> The Commission maintains, "A ban on hydraulic fracturing is a ban on oil and gas operations." Mot. at 7. It argues that a ruling upholding the ban on hydraulic fracturing in Longmont II "would eliminate the dispute in Longmont I about the extent to which the City can regulate certain aspects of oil and gas operations." Id. According to the Commission, this result occurs because, as a practical matter, there will be no oil and gas operations in the City if operators are prohibited from using hydraulic fracturing.

Order of Feb. 25, 2014, 12CV702. Accordingly, the Court stayed *Longmont I* in order to await the determination of the de facto ban question in *Longmont II*, potentially rendering *Longmont I* moot. *Id.*

Because material issues of fact – whether fracking is necessary and whether it has alternatives – are either disputed, or undisputed in favor of the Defendants, Plaintiffs are not entitled to summary judgment as a matter of law.

E. ARTICLE XVI DOES NOT CONFLICT WITH THE AREAS AND ACTIVITIES OF STATE INTEREST ACT

The Areas and Activities of State Interest Act (AASIA) allows a local government to seek permission from the COGCC to restrict mineral resource extraction in an area. § 24-65.1-201, -202(1)(a), (d), C.R.S. (2013); *accord* COGCC SJ Brief at 16. However, the COGCC

[22] "[T]he **threshold issue** in Longmont II (whether a ban on fracking is a ban on oil and gas development) overshadowed the issues in Longmont I." COGCC Reply in Support of Motion to Stay, at 4 (Feb. 19, 2014) (Case No. 2012CV702) (also calling the issue "seminal" to *Longmont II* and criticizing the City's supposed attempt to "downplay [this] threshold issue in *Longmont II*"). "[T]he ban on hydraulic fracturing would halt all future oil and gas development within the City limits . . . . [T]he absence of future development and development related activities will eliminate the existence of any dispute regarding the validity and enforceability of the challenged portions of the Ordinance at issue in Longmont I." COGA Reply in Support of Motion to Stay, at 2, 4 (Feb. 20, 2014) (Case No. 2012CV702) (calling the question of alternatives to fracking "a **threshold issue**, capable of mooting *Longmont I*" (emphasis added)). The Court may also have referred to this as a "threshold issue" as a telephone status conference.

makes a logical leap when it asserts AASIA provides the "exclusive" means for local governments to regulate oil and gas operations. *Id.*

AASIA was enacted in 1974 as H.B. 1041, well before the Supreme Court laid out the framework in *Bowen/Edwards* giving local governments significant authority to regulate oil and gas concurrently with the state. Colo. Rev. Stat. Ann. § 24-65.1-401 (West 2014). If a local regulation does not create an operational conflict, it is permissible. *Bowen/Edwards*, 830 P.2d at 1059-60. Also, if a local regulation covers a matter of local concern, it supersedes any state statute with which it may conflict, including AASIA. *Webb*, 2013 CO 9, ¶ 17. Accordingly, AASIA has no impact on the operational conflict and home rule analysis discussed above.

Furthermore, by its own terms, AASIA is a *permissive* statute, giving local governments an *additional* means to regulate. "Although local governments are not compelled by the Act to declare any particular activity to be of state interest, they must make such a declaration in order to exercise power under the Act." *City & Cnty. of Denver v. Bd. of Cnty. Comm'rs of Grand Cnty.*, 782 P.2d 753, 758 (Colo. 1989). "There is nothing in the [AASIA] which would indicate that local governments have any duty to declare such projects or areas to be a matter of state interest," or "that local governments are Mandated [*sic*] to make designations upon the Commission's request." *Colorado Land Use Comm'n v. Bd. of Cnty. Comm'rs of Larimer Cnty.*, 199 Colo. 7, 12, 604 P.2d 32, 35 (1979). In fact, "the General Assembly also provided that 'nothing in [the AASIA] shall be construed as enhancing or diminishing the power and authority of municipalities.'" *Id.* (quoting § 24-65.1-105(1), C.R.S.). AASIA is merely "another source of land use planning authority." *Colorado Min. Ass'n v. Bd. of Cnty. Comm'rs of Summit Cnty.*, 199 P.3d 718, 729 (Colo. 2009).

Nothing in AASIA says that its method is required for a local government to restrict oil and gas operations, or that it is the exclusive means in any context. Because the City has never attempted to exercise power under AASIA's permissive provisions, it is not relevant to this case.

F. PLAINTIFFS HAVE NOT PROVEN AN UNLAWFUL TAKING OF PROPERTY WITHOUT JUST COMPENSATION

Alone among the Plaintiffs, TOP argues in conclusory fashion that, because Article XVI is allegedly an unconstitutional taking of property without just compensation, it is preempted by statute. *See* TOP SJ Motion at 17-18. There are several problems with this argument.

First, TOP has agreed not to pursue a takings claim in this litigation. The agreement states, "TOP agrees not to assert, either directly or indirectly (through another party), any takings claim or claim for damages against Longmont in the COGA action. TOP will stipulate to this in its Complaint in Intervention." Ex. 26 ¶ 1. TOP has complied with the agreement to this point, including in its Complaint in Intervention the statement, "TOP has agreed not to assert, either directly or indirectly (through another party), any takings claim or claim for damages against Longmont in this action." Ex. A to Motion to Intervene, ¶ 15 (June 21, 2013).

While TOP's argument is not a claim for damages, it is a claim premised on the assertion that a taking has occurred. That makes it a takings claim which is extraneous to TOP's Complaint and which TOP is barred from pursuing in this action. *See Comstock v. Collier*, 694 P.2d 1282, 1284 (Colo. App. 1984) ("[T]he basic philosophy behind our modern rules of pleading is to give an adversary notice of what is to be expected at trial."); *Davis v. Sun Oil Co.*, 953 F. Supp. 890, 892 (S.D. Ohio 1996) (denying relief because it was not sought in the complaint).

Second, the statute TOP cites, from the Eminent Domain chapter of Title 38, does not apply. It provides, "Notwithstanding any other provision of law to the contrary, a local government shall not enact or enforce an ordinance, resolution, or regulation that requires a nonconforming property use that was lawful at the time of its inception to be terminated or eliminated by amortization." § 38-1-101(3)(a), C.R.S. (2013). TOP does not attempt to explain how fracking is a "nonconforming property use" in Longmont. A nonconforming use is a "[l]and use that is impermissible under current zoning restrictions but that is allowed because the use existed lawfully before the restrictions took effect." USE, Black's Law Dictionary (9th ed. 2009). Oil and gas operations are still allowed in Longmont; many such operations are ongoing, and are not required "to be terminated or eliminated by amortization." In fact, the City has *granted* TOP a permit to drill a well to replace the leaking Rider Well. Ex. 48.

Third, the Colorado Court of Appeals held that section 38-1-101(3)(a) covered a matter of mixed state and local concern, rather than purely local concern, only because it prevented an unconstitutional taking of property rights. *JAM Restaurant, Inc. v. City of Longmont*, 140 P.3d 192, 196-97 (Colo. 2006). TOP cannot seriously be asserting that any prohibitory regulation on oil and gas operations constitutes an unconstitutional taking. For example, COGA explains that the COGCC rules provide that "drilling fluids may never be disposed in a pit." COGA SJ Brief at 21. Is this a taking too? TOP's brief analysis makes no distinction. The law of regulatory takings is complex, and TOP does not discuss it at all. For example, local ordinances are not takings "merely because they restrict the ability of land owners to realize greater profit from the use of their property." *Reale Investments, Inc. v. City of Colorado Springs*, 856 P.2d 91, 93

(Colo. App. 1993). A taking has occurred only when the government denies a landowner "all economically viable use of his property." *Id.* at 94.

TOP therefore has not proven as a matter of law that a taking has occurred which would elevate section 38-1-101(3)(a) over the City's home rule authority, described in Part IV.C, *supra*.

Accordingly, TOP's takings argument does not meet the standard for summary judgment.

V. CONCLUSION

Plaintiffs have not met their five burdens, including proving Article XVI invalid beyond a reasonable doubt. *Sellon*, 745 P.2d at 232. Considering that "all doubts as to the presence of disputed facts must be resolved against the moving party," *KN Energy*, 698 P.2d at 776, this Court should deny Plaintiffs' motions for summary judgment. Material facts are at issue which preclude judgment for the Plaintiffs as a matter of law.

DATED this 30th day of May, 2014.

Respectfully submitted,

CITY OF LONGMONT, COLORADO

Eugene Mei
City Attorney

By: */s/Daniel Kramer*
Daniel E. Kramer
Assistant City Attorney

PHILLIP D. BARBER, P.C.

By: */s/Phillip Barber*
Phillip D. Barber

ATTORNEYS FOR THE DEFENDANT

This document was filed electronically pursuant to C.R.C.P. §1-26. The original signed document is on file at the offices of Phillip D. Barber, P.C.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing **CITY OF LONGMONT'S CONSOLIDATED RESPONSE TO SUMMARY JUDGMENT MOTIONS OF TOP OPERATING CO., COLORADO OIL AND GAS ASSOCIATION, AND COLORADO OIL AND GAS CONSERVATION COMMISSION**, was served this 30th day of May, 2014, by ICCES on the following:

Karen L. Spaulding, Esq.
Beatty & Wozniak, P.C.
216 - 16th Street, Ste. 1100
Denver, CO 80202

Devorah Ancel, Esq.
Sierra Club Environmental Law Program
85 Second Street, 2nd Floor
San Francisco, CA 94105

Thomas J. Kimmell, Esq.
Zarlengo & Kimmell, PC
700 North Colorado Blvd., No. 598
Denver, CO 80206

John E. "Jake" Matter, Esq.
Julie M. Murphy, Esq.
Ass't Attorney Generals
1300 Broadway, 10th Floor
Denver, CO 80203

Eric Huber, Esq.
1650 – 38th Street, Ste. 102W
Boulder, CO 80301

Kevin J. Lynch, Esq.
Elizabeth Kutch
Timothy O'Leary
Gina Tincher
Environmental Law Clinic
Sturm College of Law
2255 East Evans Avenue
Denver, CO 80210

/s/ *Marci McQueen*